The Community-Based Partnership Approach for Affordable Housing Development:

A Case in Shenzhen, China

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ABSTRACT

Affordable housing has been a crucial urban issue in China. Given its fast-paced urbanization process, China is experiencing a dramatic increase in the demand for affordable housing. At the same time, the affordable housing is in short supply due to the demolition of existing low-income housing during the urban renewal process, and the lack of funding for housing construction.

In the United States, the affordable housing industry is relatively well-developed with a comprehensive system and a mature research framework. The literature in this area is complete with policy, financing and design. However, in China, research on affordable housing has not yet been conducted on a comprehensive basis, with existing research mostly focused on physical planning and design.

This thesis recognizes that in order to solve the problems, a comprehensive system for affordable housing development should be established. A comprehensive affordable system needs to consist of six major components: policy, planning, design, financing, and partnership. However, the scope of this research will deal with only the partnership aspect, which is about how a variety of entities collaborate in each stage of affordable housing development.

This thesis will investigate the feasibility and potential of community-based partnership approach in providing affordable housing in the context of China's urbanization and urban renewal. It will first examine the housing affordability in China. It will then look at the current affordable housing system in China. The third part presents and companies the affordable housing system in the United States and its use of community-based partnerships. This will be followed by a case study of Shenzhen's urban villages and urban village corporations. Finally, the paper will make suggestions for the Shenzhen case, and provide examples of potential community-based partnerships as well as future steps of research.

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Introduction

Background: Quick Facts on China and Shenzhen[1]

		China (2007)	Shenzhen (2007)
Population		1.3 billion	4 million registered 14 million in total (estimated)
GDP		24,953 billion RMB	781 billion RMB
GDP per Capita		18,934 RMB	55,786 RMB
Average Household Annual Income		47,343 RMB	74,610 RMB
Speed of Urbanization		20 million people per year	0.4 million per year[2]
Level of Urbanization		45.7%	100%[3]
Housing Sector	**Annual housing new construction**	about 688 million m^2	6.3 million m^2
Housing Sector	**Average market rate housing price**	3,645 RMB/m^2	12,900 RMB/ m^2
Housing Sector	**Floor area per capita**	27.1 m^2	17.4 m^2 (in 2004)[4] 19 m^2 (in 2006)[5]
Housing Sector	**Floor area per unit**	83.2 m^2 (in 2005) [6]	unknown

Table Intro-1 Quick Facts on China and Shenzhen
Data source: National Bureau of Statistics of China. http://www.stats.gov.cn/
Bureau of Statistics of Shenzhen. http://www.sztj.com/main/index.shtml

Affordable Housing in Urban China: the Large Demand and Short Supply

Given the fast-paced urbanization process, the demand for affordable housing increases dramatically. Every year, about 20 million people are urbanized and need to be housed (Hong, 2009). Due to the lower income feature of these new rural migrants, the need for affordable housing is significant. In this context, affordable housing development has received a great amount of attention since the first affordable housing program was launched in 1998. For instance, in the end of 2008, the Chinese government announced a 900 billion RMB housing stimulus package that will be carried out in three years starting in 2009; with 215 billion RMB invested on rental housing, 101.5 billion RMB on slum

[1] The sources of data for this table are mainly websites of Statistics Bureau of China, and Statistics Bureau of Shenzhen. Due to the data availability, some of the data comes from other sources, and may not be of the year 2007.
[2] Xie, 2005. This is the average growth rate between 1970 and 2000.
[3] Shenzhen is a special case. It was built upon a small fishing village and then developed into a big city. All the villages in Shenzhen are urbanized, there are no farmers in Shenzhen now.
[4] Gu, 2004
[5] Ma & Ma, 2008
[6] As cited by Zhao, 2008.

redevelopment, 600 billion RMB on economic housing. This package will also leverage other investments and create job opportunities (The Ministry of Housing and Urban-Rural Development of China, 2008).

Despite its efforts, the Chinese affordable housing system is not functioning well. In addition to the large demand, there is a short supply, due to the following reasons.

First, the fast-paced urban renewal process ongoing in many major cities since the 1990s resulted in the demolition of existing low-income housing. The conventional urban renewal approach often neglected housing affordability and thus caused serious gentrification problems. After the redevelopment, only a small part of the demolished, distressed housing was replaced by affordable housing. Most of the new housing was market rate. As a result, the low-income people who used to live in the inner city neighborhoods were gradually pushed further away to the city fringe.

Secondly, the lack of funding sources is a hurdle of providing sufficient affordable housing. Affordable housing development is currently financed by either by government funds, or by for-profit developers. Despites efforts, the amount of government funding is not sufficient. Alternatively, for-profit developers are motivated by profits to keep properties at market value.

Research Framework: towards a Comprehensive Affordable Housing System

In the United States, the affordable housing industry is relatively well-developed with a comprehensive system and a mature research framework. The literature in this industry is complete with policy, financing and design. There even exist several step by step guidebooks on affordable housing development. In contrast, China's affordable housing system is still a growing field which has many misconceptions and problems. Research in affordable housing in China has not yet been conducted on a comprehensive basis, which mostly focused on physical planning and design. The underlying mechanisms such as policy, financing and partnership structure, which are the most important aspects, have long been overlooked.

What is a comprehensive affordable housing system?

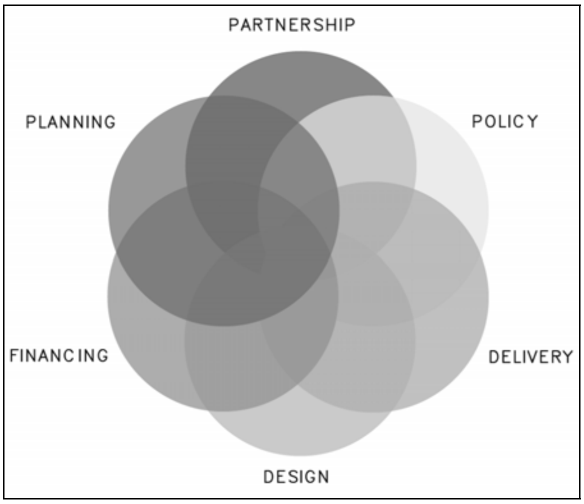

Figure Intro-1 Conceptual Diagram of the Comprehensive Affordable Housing System

A comprehensive affordable housing system should consist of six major components: policy, planning, design, delivery, financing, and partnership. Policy sets up the fundamental framework, which greatly affects all other elements. Planning is the process which determines strategic arrangements such as land use, density, and layout. Design is to figure out the detail physical layout and spatial arrangement of the project. Delivery is the process which allocates the affordable housing product into people's hands. Financing is crucial for affordable housing development, because it pieces together the money to make things happen. Partnership structure is about how different participants collaborate in each step of the development process. All the elements are interdependent and thus form a dynamic system.

This thesis will focus on one of the six aspects of the comprehensive affordable housing system: the partnership.

Why partnership?

The core of the partnership concept could be seen as a joint effort between the public and either the private for-profit or private non-profit entities. Each participant shares risks and responsibilities (Canada Mortgage and Housing Corporation [CMHC], 1998). There are three key benefits of the partnership approach:

- Access to more resources, such as funding and expertise from different providers, and the effective use of those resources.
- Public participation to make sure people's needs are well met.
- Improve regulation and administrative structure to ensure fairness and transparency.

The participants of the partnership include but are not limited to: government agencies, quasi-governmental organizations, developers (for-profit and nonprofit), community development corporations, nonprofit organizations, philanthropies, financial institutions and other investors. The partnership takes place in each stage of the development process and applies to many geographical levels such as multi-state, state, municipal and local community levels.

Why community？

According to the experience in many countries all over the world, the benefits of community participation includes providing local knowledge, fostering relationships, and community support. Most importantly, community participation can insure the needs of local residents are fairly and well met.

In China, affordable housing development projects are run by the government in a top-down approach with little local community participation. This disconnection between the policy makers and the local communities may have a result that the needs of community are not adequately met. In order to tackle these issues, the community-based organizations should become one of the primary sponsors of affordable housing projects.

Skeptics may argue that there are no real "community" in China. Although it is true that there are few traditional community organizations, it is not hard to observe that there are many potential ones: such as the Work Unit system in the past, and the Residents' Committee nowadays. One major challenge for China, is finding a way to cultivate a community-based environment on the basis of the existing potential "community-based organizations".

Research Methodology

Thinking process

This thesis will investigate the feasibility and potential of a community-based partnership approach in providing affordable housing in China. It will first examine the housing affordability in China. It will then look at the current affordable housing system. The third part presents and companies the affordable housing system in the United States and its use of community-based partnerships. This will be followed by a case study of Shenzhen's urban villages and urban village corporations. Finally, the paper will make suggestions for the Shenzhen case, and provide examples of potential community-based partnerships as well as future steps of research.

Comparison study and case studies are the major methodology employed. The data, facts and opinions adopted are gathered from literature, site survey and interviews done by the author.

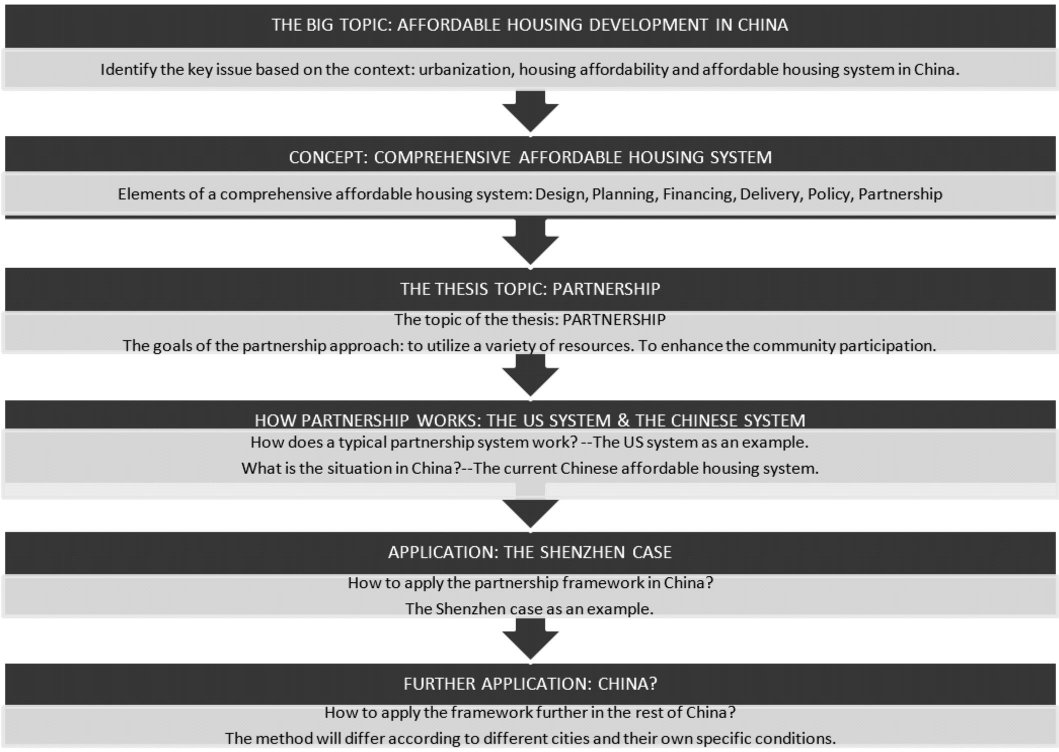

Figure Intro-2 Thinking Process

Why choose the Shenzhen case?

The unique feature of the Shenzhen case is the crucial role played by the urban village corporations. Some critics may state this involvement is unique and the Shenzhen case cannot be generalized to other urban renewal projects. However, urban village and urban village corporations is a common phenomenon in China. Furthermore, if the urban village corporations are considered as a potential community organization, then the Shenzhen case can be seen model for all urban renewal in China.

Why comparing between the U.S. system and the Chinese system?

Due to the remarkable dissimilarities in national contexts between the two countries, there is a risk of "comparing apples with oranges". However there are important similarities that make such a comparison valid and meaningful.

[Differences]

One of the most important differences between the US system and the Chinese system is the fiscal system. For instance, the United States has a very comprehensive tax system, which enables the use of the Low Income Housing Tax Credits (LIHTC). However, in China, there is no good basis for this type of tax credit funding mechanism.

Another important difference is the governmental structure and policy context. In the United States, the federal government only places limited control over the housing system through the Department of Housing and Urban Development (HUD), while the state and local governments have the freedom to design their own policy and decide how to use the federal money. But in China, the affordable housing programs are strictly controlled by the central government.

The third difference is the community environment. The United States has a better supported environment for community which has fostered the growth of community organizations. The environment is China is in its infancy.

[Similarities]

First, there are similarities between the current urban renewal process in China and the one in the United States during the 1950s to 1960s. The motivation and initial objectives of both programs was to provide better housing condition and increase the land value in order to fuel economic development. Consequently, the urban renewal in both countries caused similar side effects, such as the need for low-income housing was ignored.

Secondly, both countries experience similar key problems for affordable housing development, such as the gap between the need and supply.

Thirdly, the key needed resources, the funding and expertise, are similar in both of the countries.

Lastly, in China, the governmental-conducted approach today is very similar to the public housing era several decades ago in the United States. The problematic public housing policy in the United States and the later reforms can be a good reference for China. It is highly possible that Chinese affordable housing system would adopt the similar evolution path, and see the flourish of the nonprofit sector and the partnership approach in the following one or two decades.

Chapter 1. Housing Affordability in Urban China[1]

1.1 Overview of the Housing Sector in China

Housing Market Growth

Since the completion of the housing commercialization in 1998, the investment in real estate has an average annual increase rate of 21.5%, while the annual average increase rate for housing sector is 22.9% (Zheng, Man & Ren, 2009).

Home Ownership Rate

According to the 2007 Large-Sample Urban Household Survey done by the National Bureau of Statistics of China[2], as of 2007, the home ownership rate is 82.3%, which is very high comparing to the 68.2% in the United States[3]. However, the numbers vary greatly from 34.8% to 97.8% across cities (as cited in Zheng, Man & Ren, 2009).

Average Floor Area per Capita

As stated in the China Statistics Year Book of 2008, the nationwide average per capita housing floor area is 21.6 square meters in 2007. However, according to a report by the Ministry of Housing and Urban-Rural Development (2004), they are aggressively planning to increase the per capita living space to 35 square meters, and increase the average unit size to 100 to 120 square meters (Zhao, 2008), which is not very realistic and reasonable. In terms of improving housing condition, the government is paying too much attention on increasing the housing stock, which does not tackle the fundamental issue of affordability.

Housing Price

According to the China Statistics Year Book of 2008, in 2007 the national average housing price is 3,625 RMB per square meter. Since 2004, the annual increase rate skyrocketed to double digit. From 2004 to 2007, the average annual growth rate is 18.7%. From 1999 to 2007, the housing price doubled nearly (National Bureau of Statistics of China, 2008).

[1] The focus of this chapter is to talk about the affordability. Therefore it will not get into the detail of explaining the mentioned affordable housing programs. The detailed explanation can be found in chapter two.
[2] This survey was conducted by the National Bureau of Statistics of China in 2007. It covered more than 600 cities all over China with 520,000 responses to the questionnaires. Part of the data was cited in Zheng, Man & Ren, 2009.
[3] The U.S. Census Bureau. *HousingVacancies and Homeownership (CPS/HVS).* http://www.census.gov/hhes/www/housing/hvs/historic/index.html.

Housing Stock by Tenure

According to the 2007 Large-Sample Urban Household Survey, the market-rate commercial housing accounts for 40.1% of the total housing stock; the privatized former state owned housing accounts for 34.2%; the subsidized home ownership housing (the Economic Housing) and the public rental housing account only for 3.9% and 7.0% respectively (as cited in Zheng, Man & Ren, 2009). This shows how insufficient the affordable housing supply is.

1.2 A Context of Urbanization and Urban Renewal

1.2.1 Tremendous Needs for Housing due to the Fast Urbanization Process

Given the fast-paced urbanization process, affordable housing development has long been one of the major urban issues. The urbanization rate increased from 19.6% in 1980 to 42.2% in 2007 (Song, 2009), with a growth rate about two times higher than the world's average level, and is going to reach a similar level of the developed regions (about 70%) by 2050 (Song & Ding, 2007).

Every year, about 20 million people are urbanized and need to be housed (Hong, 2009). The housing affordability matters greatly to those rural migrants. But the rural migrants' needs of accessing urban housing system has been overlooked (Song, 2009).

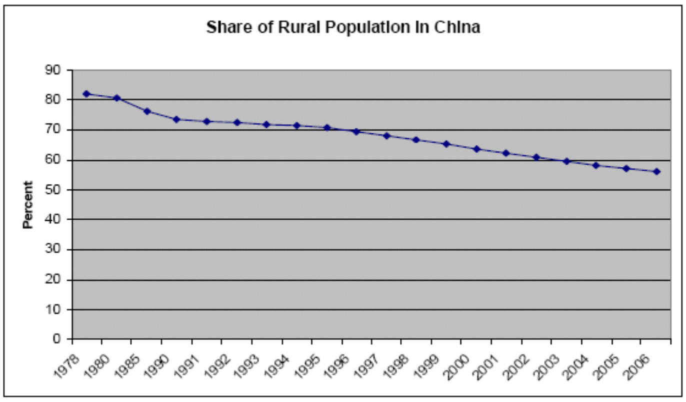

Figure 1-1 Share of Rural Population in China
Source: China Statistics Year Book 2007. As cited by Hong, 2009.

1.2.2 Urban Renewal in China: Problem Solving or Problem Causing?

Since the early 1990s, large scale urban housing renewal projects has been going on in the major cities (Bai, 2008). For instance, in Beijing, from 1990 to 2000, 168 housing renewal projects were launched. 4,990,000 square meters of old housing was took place by 14,500,000 square meters of new construction. 184,000 households were relocated. The total investment reached 46.9 billion RMB (Zhou, 2002). In Shenzhen, the focus of urban renewal is on the urban village redevelopment.

According to the planning bureau's proposal announced in 2005, the existing urban villages will all be redeveloped in 10 to 20 years (Shenzhen Planning Bureau, 2005).

The conventional urban renewal neglected housing affordability and caused serious problem of gentrification. After the redevelopment, there was some affordable housing provided in the same community, but most of the new housing was market rate. The poor people who used to live in the inner city neighborhoods were gradually pushed further away to the city fringe.

Without substantial governmental subsidies, the redevelopment projects were financed by allowing developers to sell market-rate housing. There were no related policies to limit the sale of the market-rate units, or define a certain rate of the return of original residents. Therefore, due to the developers' motivation of profit maximization, moderate-and low-income housing quickly lost favor (Zhang & Fang, 2004). In some cases, none of the original residents could afford to return.

1.2.3 Urban Renewal as an Opportunity for Affordable Housing Development

Affordable housing should be one of the major goals of the urban renewal. The target of urban renewal projects are always the existing low-income communities in the inner city. Therefore, the redevelopment should provide at least same amount of housing for the low-income people, otherwise it will cause a loss of original residents and therefore destroy the community. Furthermore, the due to the lack of mobility of the poor, affordable housing needs to be located in the inner city, in order to be close to the urban resources. Lastly, the high land value in the inner city provides an opportunity for cross-subsidy (if well-controlled). Therefore, affordable housing development should be weaved into the urban renewal process.

1.3 Income Level and Housing Cost Burden Criteria

1.3.1 The U.S. Income Level System

According to U.S. Department of Housing and Urban Development (HUD), in the United States, the definition of income levels are based upon the Area Median Income (AMI). There are five benchmark incomes: 30% AMI, 50% AMI, 80% AMI, 100% AMI and 120% AMI, which divide the population into six income groups. The extremely low-income is below 30% AMI, the very low-income is between 30% and 50% AMI, the low-income group is between 50% to 80% AMI, the median-income group is between 80% and 100% AMI, the moderate income group is between100% to 120% AMI, the high-income group is above 120% AMI.

1.3.2 The Chinese Income Level System

Unlike in the United States, in China, there is no universally agreed income group definition. The description of "low-income, moderate-income, and high-income" is vague. But we can get a sense by looking at the income qualifications for affordable housing programs: the Economic Housing (for homeownership) and the Public Rental Housing.

In Beijing, for urban residents, as of 2007, the average annual per capita disposable income[4] is 21,989 RMB, which is about 1,832 RMB per month. The urban poverty line is 300 RMB per person per month, which is 16.37% of the average income.[5] In Shenzhen, as of 2007, the average annual per capita disposable income is 24,870 RMB, which is about 2,073 RMB per month.[6] The urban poverty line in Shenzhen is 415 per person per month, which is about 20% of the average income.

Income	Beijing	Shenzhen
Annual disposable income per capita	21,989 RMB	24,870 RMB
Estimated three-person family disposable annual income	65,967 RMB	74,610 RMB
Estimated three-person family disposable monthly income	5,497 RMB	6,218 RMB

Table 1-1 Annual Average Income in Beijing and Shenzhen (2007, RMB)
Source: data from the statistics bureaus of Beijing and Shenzhen

Following is a list of the income standards for the two housing programs, as of a three-person household.

		Beijing	Shenzhen
Income Requirement of Major Programs	**Economic Housing**	Annual household income below 45,300 RMB (68.67% of average income)	Annual household income below 69,756 RMB (93.5% of average income)
	Rental Housing	Annual household income below 20,880 RMB (31.65% of average income)	Annual household income below local poverty line: 14,940 RMB (20% of average income)
Average three-person household annual disposable income as of 2007		65,967 RMB	74,610 RMB

Table 1-2 Income Standards of Affordable Housing Program (2007)
Source: data from the statistics bureaus of Beijing and Shenzhen

[4] The disposable income is calculated by deducting estimated tax payment and other social insurance payment from the gross income. The disposable income is the most commonly used income indicator in China. Therefore it is more convenient to use the disposable income rather than to use the gross income.
[5] Bureau of Statistics of Beijing.
[6] Bureau of Statistics of Shenzhen.

1.3.3 Criteria for Housing Affordability

In China, the difficulty of evaluating the housing affordability is that there is no official definition of income groups and housing affordability criteria. Therefore, the housing affordability standards in this section were borrowed from the United States. The Housing Price to Income Ratio, Housing Affordability Index, and Housing Cost Burden are used as indicators. The data of China are based upon the 2007 Large-Sample Urban Household Survey; the calculation of the three criteria based on the data are cited from Zheng, Man and Ren's paper: "The State of Housing Markets in China: Trends, Patterns and Affordability" (Zheng, Man, & Ren, 2008).

Housing Price to Income Ratio (PIR)

According to the Global Urban Observatory (GUO) of UN-HABITAT, PIR is the ratio of median house prices to median family annual income. PIRs of 3 to 5 are regarded as satisfactory. The PIRs between 3.1 to 4.0 are considered "moderately unaffordable", the PIRs between 4.1 and 5.0 are considered "seriously unaffordable", while the PIRs above 5.1 are considered "severely unaffordable" (as cited by Zheng, Man & Ren, 2009).

As of 2008, the survey of Demographic shows the PIR in the United States from the 175 sample cities is 3.2, while according to the 2007 Large-Sample Urban Household Survey, the nationwide median PIR in China is 5.56, which means "severely unaffordable" (as cited by Zheng, Man & Ren, 2009)[7].

Housing Affordability Index (HAI)

In the United States, since 1981, the National Association of Realtors (NAR) publishes Housing Affordability Index (HAI) monthly. The HAI assumes borrowers make a 20% down payment and the maximum mortgage payment is 25% of the gross monthly income of the household. An HAI index of 100 means a household earning the median income can afford to purchase a median-priced home. The higher the index number is, the more households can afford to buy a home. In 2008, the HAI in the United States is 128.6, while according to the 2007 Large-Sample Urban Household Survey, the nationwide HAI in China is only 81.8 (as cited by Zheng, Man & Ren, 2009)[8].

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[7] This is calculated by Man in her paper based on the 2007 Large-Sample Urban Household Survey.

[8] This calculation was done based on the data collected from the 2007 Large-Sample Urban Household Survey done by the National Bureau of Statistics of China. In this paper they picked 256 cities out of all the more than 600 cities and did the calculation. According to the Chinese standard, the down payment is 30%, the mortgage term is 30 years with an interest rate of 6.84%, and the maximum mortgage payment is 25% of the household gross monthly income.

Housing Cost Burden

In the United States, the most popular criteria for housing affordability is defined as the percentage of housing expenditures (rent or mortgage payment) to the household income. A monthly expenditure under 30% of the monthly gross income will be considered as affordable. An expenditure over 30% of the gross income will be considered cost-burdened, and over 50% expenditure will be considered extremely cost-burdened.

Due to the data availability, in this paper, the average disposable income is used as the income measure. The housing cost burden in China will be discussed in detail in section 1.4, “Affordability of Market Rate Housing” and section 1.5, “Affordability of Affordable Housing”.

1.3.4 Summary

In China, the income group definition vary from city to city. The general situation is that the Economic Housing income qualification is about 70% of the average income in a certain area; while the rental housing qualification is about 30% of the average income. This is similar to the US criteria of the low income and extremely low income groups. Furthermore, in China, the lowest income level is defined as the poverty line, which is around 20% of the average income. The government provides subsidy to guarantees all the registered urban residents reach the poverty line.

1.4 Affordability of the Market-Rate Housing

1.4.1 For Home Owners

In order to simplify the calculation, following assumptions are made to all calculations:

- All the data is in 2007, and comes from the city statistics bureaus. The unit of money is RMB, the unit of area is square meter.
- According to the People’s Bank of China, as of January 1, 2007, the market home mortgage interest rate was 7.56% (for maturity longer than five years).
- There is no interest rate subsidy for the calculations.
- The down payment is 20%, the mortgage maturity is 30 years with equal monthly payment.
- Due to the data availability, the income is quoted as disposable income (quoted in annually), which is the gross income deducting estimated tax and social insurance payments.
- The household monthly income is calculated by the annual average per person income multiply three people in a household and divided by 12 months.

Take Shenzhen as an example. The figure below shows the "percentage of income" residents would have to pay for different unit sizes. In the United States, the typical guidelines advise that a household should not pay more than 30% of the income for housing. However, one can see that by this 30% standard, the housing in Shenzhen is oversized and unaffordable. This situation is quite common all over China.

Average Monthly Household Income	**Monthly Mortgage Payment**	**Average Housing Price**	**Average Unit Size**	**Average Unit Price**	**Mortgage Principal**	**Mortgage Payment as of % of Income**
6,218	6,034	13,370	90	1,203,300	962,640	97%
6,218	4,023	13,370	60	802,200	641,760	65%
6,218	8,045	13,370	120	1,604,400	1,283,520	129%
6,218	1,877	13,370	28	452,571	299,488	***30%***

Table 1-3 Market-Rate Housing Affordability in Shenzhen, 2007

1.4.2 For Renters

There is no reliable official data of market rent. According to some real esate brokerage websites, the average rent in big cities is about 2,000 RMB per unit per month. Take Shenzhen as an example, given an average household monthly disposable income of 6,218 RMB, it is about the 32% of the monthly household income, which is close to the affordable level. However, we should be aware that the incomes of renters are not as high as home buyers. Therefore this data does not necessarily mean the rental housing is more affordable. More detailed data is needed to draw any meaningful conclusion.

1.5 Affordability of the "Affordable Housing"

There are two primary affordable housing programs: the Economic Housing Program (home ownership) and the Rental Housing Program.[9]

1.5.1 For Home Owners: the Economic Housing

Here we are using the same assumptions as for the market-rate affordability analysis. The mortgages in calculations are also unsubsidized.

There are no clear data of the accurate average price of economic housing in big cities. However, according to the policy, the price of Economic Housing is intended to be below 4,000 RMB per square meter in top tier cities. Therefore, 4,000 RMB is used as the price to calculate the housing affordability. Again, take Shenzhen as an example, given the ideal price of 4,000 RMB, the Economic

[9] These programs will be explained in detail in Chapter 2.

Housing is affordable. However, it is observed that in the market, the Economic Housing is actually sold at a higher price. Also, due to the strict application criteria, only a small part of the officially registered urban residents can have access to the Economic Housing.

Average Monthly Household Income	Monthly Mortgage Payment	Average Housing Price	Average Unit Size	Average Unit Price	Mortgage Principal	Mortgage Payment as of % of Income
6,218	1,805	4,000	90	360,000	288,000	29%
6,218	1,203	4,000	60	240,000	192,000	19%
6,218	2,407	4,000	120	480,000	384,000	39%

Table 1-4 Economic Housing Affordability in Shenzhen, 2007

1.5.2 For Renters: the Rental Housing

There are two types of subsidies in the public rental housing program for the lowest-income people below local poverty lines: the direct housing allocation and the rent subsidy. The latter one is usually applied.

In Beijing, the rent subsidy standard is 10 square meters per person and 40 RMB per square meter. So a three-person family can get 1,200 RMB rent subsidy per month. In Beijing, as of 2007, the market rent is about 2,200 RMB for a unit. Therefore a family needs to pay 1,000 RMB in addition to the subsidy, which is almost the total household income of a family on the poverty line (1,170 RMB per month).[10]

In Shenzhen, the rental housing allocation standard is 15 square meters per person. The rent subsidy is calculated according to the local market rent, which ranges from about 10 RMB per square meter to about 30 RMB per square meter. So a three-person family can get a subsidy ranges from about 450 RMB to 1,350 RMB. Considering the Shenzhen poverty line of 415 RMB per person per month, which is 1,245 RMB per family, and the market rent over 2,000 RMB per unit, it is still a large burden.

By looking at the two major cities, Beijing and Shenzhen, we can conclude that the Public Rental Housing program is not very helpful.

1.6 Summary: the Housing Affordability Gap

Although calculations in this section are very rough, we can still draw the conclusion that, as for Beijing, according to the Economic Housing application criteria, people of an annual household

[10] According to the city government of Beijing, the 2008 poverty line is 390 RMB per person. Therefore it is 1,170 RMB of a three-person household.

income above 68.67% of the average income are not well served by proper housing program, which means a huge gap between the affordable housing supply and the actual needs.

Moreover, as mentioned in the above analysis, even the “affordable housing” is not so affordable to the majority of the low- to moderate-income population. This is why there is the existence of the “sandwich class”, which refers to people who are not qualified for the affordable housing program, but still cannot afford market-rate housing.

Chapter 2. The Chinese Affordable Housing System

2.1 Evolution of the Chinese Housing System

Since 1980, in nearly three decades, along with the transition of the planned economy to market economy, China's housing system has evolved from a welfare-based allocation system to a market-oriented commercial system. It has developed the modern real estate market, and improved greatly the living condition of Chinese people. However, there are also many issues such as the unfairness and extremely high housing price. This whole process can be simply divided into three major periods.

1950s to Late 1970s: Transformation from Private Market to Public Ownership and Establishiment of the Welfare-Based Housing Allocation System

After the foundation of the People's Republic of China in 1949, under the socialism economy, the central government gradually transformed the former private ownership of the properties into public ownership (Wang & Murie, 1999). At the same time, the central government had built large quantities of public housing through industrialization, urbanization and urban renewal programs (Wang, 1995 and Wu, 1996). In this era, the housing was considered as part of the social welfare system. Under the socialist planned economy, the vast majority of urban housing was constructed through capital investment funds channeled by the state directly to state-owned enterprises (SOEs), or to a lesser extent through local government (Bray, 2005). The residents were all renters without the ownership. According to World Bank figures, in 1979 over 90 percent of all urban housing was financed this way (World Bank, 1992). From 1979 to 1990, the financial burden of housing development gradually shifted from the central government to the SOEs (Bray, 2005).

However, the capacity for an SOE to provide new housing to its employees depended totally upon its own financial situation. As a result, inequalities and inadequacies in housing provision have increased substantially (Bray, 2005). For instance, in 1978, the floor area per capita was only 6.7 square meters (Long &Wang, 2009).

1980-1997: Initiation and Experimental Period

In 1980s, the market economy was introduced to China. At the same time, the central government started to launch a land reform. Before the land reform, under the planned economy, the urban land in was owned by the state (the city governments directly) and rural land was owned collectively by rural communities. In the urban area, the state directly allocated land to land users for free. In 1988, the Chinese National People's Congress revised the Constitution at its Seventh Conference in respect of two important points (Wang, 1999):

- allowing the legal existence of the private sector in the economy; and
- legalizing the paid transfer (sale) of the *use right* of state-owned land.

Since then, the use right of the urban land could be transferred at a market price to the users for a certain amount of time (70 years for residential use, 40 to 50 years for other uses), but the land was still owned by the government. The collectively owned rural farmland could not be sold.

After the land reform, the central government started to do experiments on market-oriented housing development, with a final goal to privatize the whole housing system by fostering a market-oriented real estate sector (Wang, 1999). The very first generation of state owned housing developers, private developers, as well as the public-private joint venture developers came into existence. The government started to see the real estate sector as an engine for economic growth, especially after the tax reform in 1994 (Zheng, Man & Ren, 2009).

In order to foster the real estate sector, the central government raised the rent to encourage people to buy market-rate housing. A new financing system for both housing construction and personal purchasing was also established. The banks started to make loans for both housing builders and consumers.

In the beginning of 1990s, in order to help individuals finance purchasing homes, the *Housing Provident Fund* system was established as part of the urban social welfare system. It took several years to spread all over the cities in China. Under this system, a certain percent [1]of salary was set aside into a specific account. The employers also put in the same amount of money in the same account. The account was managed by the *Housing Provident Fund Management Committee*, and was saved in certain authorized banks. The interest rate for Housing Provident Fund savings and mortgages are determined by the *People's Bank of China*.

1998 to Present: Termination of the Welfare System and Overall Commercialization

In 1998, the central government officially terminated the welfare housing allocation system. At the same time, it started to establish an affordable housing system, as well as place regulations upon the real estate market to prevent the price skyrocketing.

As mentioned in Chapter 1, since 1998, the investment in real estate has an average annual increase rate of 21.5%, while the housing sector increases 22.9% annually on average (Zheng, Man & Ren, 2009). According to the 2007 Large-Sample Urban Household Survey done by the Chinese National

[1] The percentages vary from city to city, but it is usually no less than 5%.

Bureau of Statistics[2], as of 2007, the home ownership rate in China is 82.3%. The nationwide average housing price is 3,325 RMB per square meter, while it is as high as more than 12,000 RMB per square meter in the most expensive cities.

2.2 Major Affordable Housing Programs Today

2.2.1 Programs Overview

Since 1998, simultaneously to the termination of the welfare housing system, the social housing system in China has come into the final shape. It consists of two primary programs:

•the Economic Housing Program (started in 1998)

•the Public Rental Housing Program (started in 1999)

Furthermore, besides the two governmental subsidized programs, in 2008, in order to prevent the price from skyrocketing, the government carried out the Limited-Price Housing Program, which placed a regulation on the maximum price of certain development projects. Although it is not a social housing program, it is still worth discussion. The following table shows the primary affordable housing programs as well as other housing-related programs, comparing to the market rate housing.

Program Name	Start Year	Subsidy Type	Targeting People	Key Qualification	Funding Sources	Average Price (RMB/M2, Beijing, 2007)
Public Rental Housing	1999	Housing allocation Rent subsidy	Local poverty line	Registered urban residents; Below poverty line.	Governmental funds	N/A
Economic Housing	1998	Subsidized price	Low- to moderate-income	Registered urban residents; Income requirements.	Governmental subsidy: land, taxes and fees	About 4,000
Limited-Price Housing	2008	Limited price	Moderate- to higher moderate-income (the “sandwich class”)	Registered urban residents; Income requirements.	Governmental subsidy: land, taxes and fees	6,350
Market Rate Housing	1998	None	all	None	None	12,000

Table 2-1 Comparison of Primary Affordable Housing Programs, other Housing Regulations and Market-Rate Housing in China

[2] This survey was conducted by the National Bureau of Statistics of China in 2007. It covered more than 600 cities all over China with 520,000 responses to the questionnaires.

Qualification Standards Overview

Name	Residency	Income	Housing Ownership Condition	Has Assets Max Limit
Economic Housing	registered	Defined by city	No housing	Yes
Rental Housing	registered	City Defined Poverty line	No housing	Yes
Limited Price Housing	registered	City	No requirement	No

Table 1-6 Housing Program Qualification Standards Summary

From the above table we can see that all programs require a status of registered local urban resident, which is called "Hukou" in Chinese Pinyin. The two subsidized programs have requirements on the receiver's income level, amount of assets and housing condition. While the Limited-Price Housing Program only has requirement on local urban Hukou. The details of the programs will be discussed below.

2.2.2 Public Rental Housing

First launched in 1999, this program targets the lowest income households with the lowest income and the worst housing conditions.

Qualification

The rental housing program is under the control of each city government, therefore the qualification and detailed regulations vary from city to city. But all the cities share the following general requirements:

- All the family members should be officially registered local urban residents[3].
- The family income should not exceed the local poverty line.
- The housing floor area per person should not exceed a certain level.
- The family should not own a home, and should not have any form of housing subsidy.
- The family total assets should not exceed a certain amount (this amount is not very clearly defined).

[3] However, according to the unconfirmed news, recently, some cities, such as Shenzhen, started to consider the unregistered residents as well.

Household Population	Annual Household Income	Housing Area per Capita	Household Net Worth
1	<=6,960	<=7.5m^2	<=150,000
2	<=13,920	<=7.5m^2	<=230,000
3	<=20,880	<=7.5m^2	<=300,000
4	<=27,840	<=7.5m^2	<=380,000
5	<=34,800	<=7.5m^2	<=400,000

Table 2-2 Qualifications for Rental Housing Application in Beijing (2007)
Source: Beijing Municipal Commission of Housing and Urban-Rural Development

In Beijing, the 2007 qualification income level is 580 RMB per person per month (31.65% of average income)[4], which means a 1,740 RMB monthly income and a 20,880 RBM annual income of a three-person family. In Shenzhen, as of 2008, the poverty line is 415 RMB per person per month, which means a 1,245 RMB monthly income and a 14,940 RMB annual income of a three-person family.

Forms of Subsidy

There are two forms of subsidies under this program: the direct allocation of public rental housing, and the monetary rent subsidies to the tenant, which is similar to the housing voucher in the United States. Usually, for the direct housing allocation, the floor area per person is 15 square meters, and the unit size should not exceed 45 square meters; for the monetary subsidy, the city government will provide a certain amount of money on a monthly basis. For instance, in Beijing, it is 40 RMB per square meter and 10 square meters per person, therefore it is 400 RMB per person, which is 1,200 RBM per month for a three-person family (Beijing Municipal Commission of Housing and Urban-Rural Development). Or, in some cities such as Shenzhen, the government will provide an amount of the local "fair market rent".[5]

Housing Stock and Funding Sources

[4] This income level is different from Beijing's local poverty line. According to the Beijing Municipal Commission of Housing and Urban-Rural Development, this 580 standard is determined as follows: If a three-person family is going to by a 60-square-meter unit of economic housing, the total cost will be 185,300 RMB. If they take the Housing Provident Fund subsidized mortgage (the interest rate is only 3.33%, which is a lot lower than the market-rate interest rate), 10% down payment, 30 year maturity, the monthly payment will be 836, which is 279 per person. Adding this amount to the lowest living standard at 300 per person, we can get a 579 per person standard.

[5] However, the data of this "fair market rent" is not very clearly defined.

In terms of the direct rental housing allocation, the majority of the housing stock comes from these sources (Reingold &Xu, 2009):

- the transformed former public-owned housing
- the newly constructed housing by the local government, or the housing purchased by the local government
- donated housing

The primary funding sources of the rental housing program are:

- Local governmental funds (this is the most important source)
- The revenue generated by Housing Provident Fund savings
- Rent revenue (due to the low rent, this revenue only takes up a very small portion)

2.2.3 Economic Housing

The Economic Housing Program was started in 1998, targeting moderate-income households. The government gives subsidy in the forms of free land and eliminated transaction taxes (Reingold & Xu, 2009). In return, the developers are required to keep the profit at lower than 3%. The prices of the Economic Housing vary in different areas due to the difference of construction costs. But it is generally on the level of about 4,000 RMB in major cities. The qualification standards vary from city to city.

Qualification

Similar with the rental housing program, the Economic Housing program is also under the control of each city government. The general requirements are:

- All the family members should be officially registered local urban residents.
- The family income should not exceed a certain amount.
- The housing floor area per person should not exceed a certain level.
- The family should not own a home, and should not have any form of housing subsidy.
- The family total assets should not exceed a certain amount.

Household Population	Annual Household Income	Housing Area per Capita	Household Net Worth
1	<=22,700	<=10m^2	<=240,000
2	<=36,300	<=10m^2	<=270,000
3	<=45,300	<=10m^2	<=360,000
4	<=52,900	<=10m^2	<=450,000
>=5	<=60,000	<=10m^2	<=480,000

Table 2-3 Standards for Economic Housing Application in Beijing (2007)
Source: Beijing Municipal Commission of Housing and Urban-Rural Development

In Shenzhen, as of the year 2006 to 2007, the annual household income should not exceed 23,252 RMB per person, and the total assets should be below 280,000 RMB.[6]

2.2.4 Housing Provident Fund and the Subsidized Financing

As mentioned in section 2.1, the housing provident fund was launched in 1994. Under the program, a certain portion of the salary is set aside every month[7], and the employers pay the same amount and put it into an account with a government authorized bank. The fund can be used to pay for the housing cost, or to issue subsidized mortgage for home purchase. The subsidized interest rate is usually about 3%, which is about 3 percent lower than the market rate financing. However, there are very strict qualification requirements of the subsidized financing, so it is actually not accessible to many people.

2.2.5 Limited-Price Housing

This program is not a governmental subsidized program, it is a regulations of profit cap on commercial housing. It was designed to solve the housing problem of the “sandwich class” that are not served by the Public Rental Housing, the Economic Housing Program, and cannot afford the market rate housing. The city government will designate certain pieces of land for auction at a discounted price. The winning developers will have to obey the profit cap set by the government.

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[6] Shenzhen Municipal Bureau of Land Resource and Housing Management. http://www.szfdc.gov.cn/xxgk/zcxzfgl/zfbzzcwj/200903/t20090325_38191.htm
[7] Each city has a requirement of minimum percentage, which is usually around 5%. The employers can determine any percentage no lower than the minimum requirement.

However, this program is still in its experimental period, and is only available in some cities in China. Also, in order to reduce the land cost, the limited-price housing usually locates at the unfavorable sites. In Beijing, the first limited-price housing project was carried out in 2008. The average price in Beijing is about 6,350 RMB/m2, which is about half of the market rate.

Qualification

The general requirements are:

- All the family members should be officially registered local urban residents.
- The family income should not exceed a certain amount.
- The housing floor area per person should not exceed a certain level.
- The family total assets should not exceed a certain amount.

For instance, in Beijing, for a family no more than three people, the family annual income should not exceed 80,000 RMB; the housing floor are per person should not exceed 15 square meters, and the family assets should not exceed 570,000 RMB (The City Government of Beijing).

2.2.6 The 70/90 Policy

In order to control the unit size therefore to lower the unit price, in 2006, the central government placed a regulation requiring that since then, for all the newly constructed housing projects, at least 70% of the units should be smaller than 90 square meters. However, this policy did not seem to be very effective. It is very hard to implement because the developers always want to develop large units for the higher-income people in order to maximize the profit.

2.2.7 The 900 Billion Social Housing Stimulus Package

In the end of 2008, the Chinese government announced a 900 billion RMB housing stimulus package that will be conducted in three years in 2009, with 215 billion RMB invested on Public Rental Housing, 101.5 billion RMB on slum redevelopment, 600 billion RMB on Economic Housing. This package will also bring other investment and create job opportunities (The Ministry of Housing and Urban-Rural Development, 2008). Whether this large stimulus package will be effective or not still remains a question, only time can tell.

2.3 Evaluation of Current Affordable Housing System

2.3.1 Key Problem: the Affordability Gap

As discussed in Chapter 1, in China, by multiple standards, the market-rate housing is very unaffordable; even the “affordable housing” is not so affordable. Furthermore, due to the complicated qualification criteria, only a small part of the people in need could have access to affordable housing. The needs of the majority of the people, especially those who do not have a local “Hukou”, are overlooked. There is a large group of people whose income is not low enough to qualify them for affordable housing programs, but still cannot afford the market-rate housing. These people are called the “Sandwich Class”.

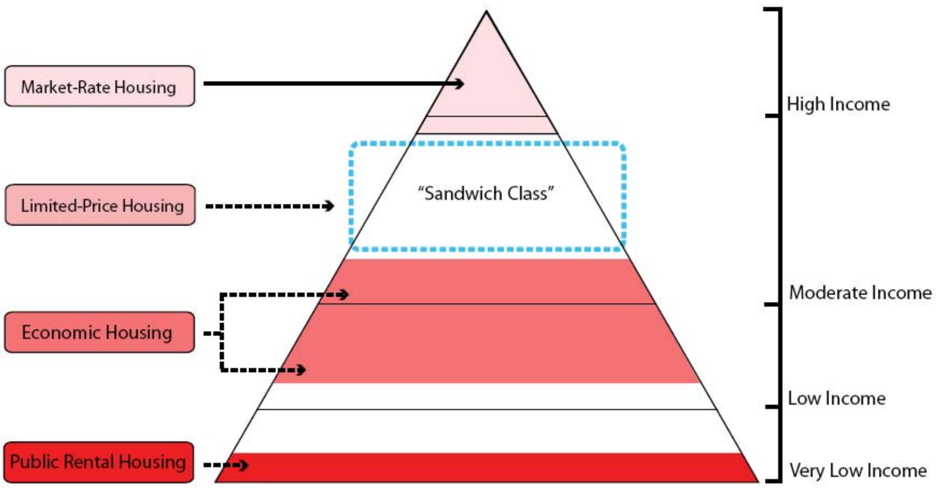

Figure 2-1 The Social Housing Programs and Their Coverage

2.3.2 Primary Reason: the Underdeveloped Partnership Structure

The current Chinese affordable housing system is built upon a top-down basis. Under the control of the central government, the local government places detailed policies and regulations, and manage the whole development and allocation process. The key players are only the central and local government, and the developer. This underdeveloped partnership structure is the fundamental reason for the problems in many aspects such as financing, management and allocation, which are all interrelated.

Problematic Delivery

Due to the unclear administrative structure, many governmental agencies are involved and therefore there are many different versions of regulations, which make it very confusing. Also, due to the fraud caused by the low transparency of administration, the affordable housing may not be delivered to people in the greatest needs. For instance, some people fake their income and housing status in order to purchase Economic Housing for speculation purpose.

Homogenous Financing System

The absence of private sector investors is the main reason for the lack of funding. Currently the Public Rental Housing program is mainly funded by the government; the Economic Housing Program relies heavily on the land subsidy and tax exemptions. The Housing Provident Fund (HPF) program was designed to leverage the private sector funds, but it is mainly used for helping individual purchase instead of financing the development projects, not to mention the amount raised by HPF is far from enough.

As of public rental housing, the supply was extremely limited. For instance, in 2007, in Shenzhen, there were only 100 units of rental housing allocated. Furthermore, the program was implemented very slowly. Until 2006, there are still 70 cities out of the 291 major cities that did not have the rental housing program implemented (Ba, Xu, &Wang, 2006).

Poor Community Participation

For the absence of local community participation, the voice of the local residents is not well heard in each stage of affordable housing policy making and development process.

In terms of the policy making and administration, the top-down approach is the reason for the arbitrary affordable housing policy. The best evidence is the overlooking of the unofficial local urban residents, especially the rural-urban migrant workers.

In terms of housing development, because the developer is the only project sponsor in the game, the motivation to maximize profit is the reason for the large unit sizes and the skyrocketing prices.

Chapter 3. The U.S. Affordable Housing System:

A Community-Based Partnership Approach

In the past several decades, the affordable housing system in the United States has evolved from the governmental subsidy-based to a partnership-based system. The key of this system is the participation of various entities in both public and private sectors, which enables the well utilization of multiple resources and expertise.

3.1 Evolution of the U.S. Affordable Housing System

Year	Incident	Program Name
1932		FHLB System
1934		Foundation of FHA
1937	Housing Act	Foundation HUD
		Public Housing Program
1974	Housing and Community Development Act (HCDA)	Section 8
		CDBG
1977	Community Reinvest Act (CRA)	N/A
1986	Tax Reform Act	LIHTC
1990	Cranston-Gonzalez National Affordable Housing Act (NAHA)	HOME
1993	Recommendations by the National Commission on Severely Distressed Public Housing	HOPE VI
2008	Housing and Economic Recovery Act (HERA)	NSP1
2009	American Recovery and Reinvestment Act (ARRA)	NSP2

Table 3-1 Milestones of U.S. Affordable Housing Evolution

3.1.1 Pre 1974: the Era of Federal Funded Programs

Prior to the 1980s, federal funded programs were the primary vehicles used to develop affordable rental and homeownership housing. In 1937, the public program targeting the lowest-income population was originated. The local public housing authorities (PHAs) are authorized to issue bonds to finance the development costs. The interest and principal on these bonds were paid by the federal government. The operating costs were covered by the rental revenue (Schwartz, 2006).

Public Housing

The public housing is always criticized as for its poor design and construction quality, poverty concentration, racial segregation and other social problems. Also, because of the funding limit, since 1980s, fewer and fewer public housing was built. Only 5% of the current public housing stock was built after 1985. The public housing stock reached its peak in 1994, and then faced dramatical decline (Schwartz, 2006).

Vouchers

The 1974 Housing and Community Development Act established the first national voucher program, known as the "Section 8" program (Section 8 New Construction and Substantial Rehabilitation programs).

In terms of the tenant-based subsidy, instead of subsidizing the interest on the project's mortgage, the Section 8 provided a direct rent subsidy for the tenant. The program paid landlords the difference between a "fair market rent" (FMR) and 30% of the tenant's income. This program is of great flexibility. Under certain standards for physical characteristics and maximum rent, and with the willingness of the landlord to participate in the program, the voucher holders can choose from any housing exists in the market (Schwartz, 2006).

In terms of the project-based subsidy, the Section 8 program is in favor of mixed-income development. Developers could designate any portion of a project for the Section 8 program; some units could be designated for market-rate occupancy. However, the Section 8 program was very expensive, and was terminated in 1983.

3.1.2 1974-1985: the Emerging of Partnerships

In this period, the federal government began to cut back housing expenditures. Block grants gradually replaced the highly centralized programs such as public housing and Section 8. The states and localities were given much more flexibility to make their own decisions and design their own housing programs. In addition to block grants, many states and localities have developed housing programs funded by their own revenue sources, which was usually housing trust funds (Schwartz, 2006).

Besides the Section 8 program, the 1974 Housing and Community Development Act also established the Commuonity Development Block Grant (CDBG). Later, the HOME program launched in 1990 is the block grant focused on low- and moderate-income housing. Through the block grants, the federal government allocated funds to both state and localities. It is often required that a certain percentage of the funds should go to the people below a certain income level, and a certain percentage of the funds should be allocated to nonprofit organizations. From this requirement we can see the federal government's intention to foster the nonprofit sector.

Since this period, most of the innovation in housing policy occurred on the state and local level, with the great support from the nonprofit sector.

3.1.3 1986 to Present: the Flourish of the Nonprofit Sector

Since the Tax Reform Act in1986, the introduction of the Low-income Housing Tax Credit (LIHTC) can be considered as the basis of the flourish of the community-based organizations in the United States. LIHTC enables the participation of nonprofit sector, especially the community development corporations (CDCs). The LIHTC is allocated by HUD, through local housing agencies to the nonprofit organizations. Then the organizations can sell the tax credits to the investors to raise equity for the development[1]. This mechanism enables those nonprofits without enough capital to be the sponsor of affordable housing development projects.

There are two major types of nonprofit organizations: the CDCs, and the large city wide or regional nonprofit organizations (Schwartz, 2006). The CDCs mainly focus on local community, on direct affordable housing development the daily community development practice; while the large nonprofit organizations focus more on indirect practice on a larger scale, and provide technical and funding support to the forefront CDCs or other community initiatives.

3.2 Key Programs and Policies

3.2.1 The Low-Income Housing Tax Credit (LIHTC)

The LIHTC program was created by the Tax Reform Act of 1986, which replaced all the previous tax incentives. It gives State and local LIHTC allocating agencies (usually state housing finance agencies) about $5 billion annually to issue tax credits to project sponsors, which can be used for acquisition, rehabilitation, or new construction of rental housing targeting lower-income households earning up to 60% AMI (Schwartz, 2006).LIHTC program is now the primary vehicle for providing affordable rental housing, and has produced 2.5 million units throughout its history. It is usually required that a certain percentage, usually 10%, of the tax credits be allocated to nonprofit project sponsors (Schwartz, 2006).

From 1995 to 2005, 15,096 projects with 1,100,130 units were built under LIHTC, among which 28.9% were sponsored by nonprofit organizations (Abt Associates, 2007). According to the National Council of State Housing Agencies, in 2007 alone, 125,000 units were supported by LIHTC program and infused $9 billion of private investment (Federal Reserve Bank of Dallas [FRBD], 2009).

LIHTC raised equity investment often represents one third of the capital costs of the new low-income rental housing (CMHC, 1998). According to the latest data, the typical amount of tax-credit equity

[1] The organizations can either sell the text credits directly, or, if it does not have enough experiences, through a syndicator. The mechanism of LIHTC will be discussed in detail later.

raised in a 9 percent tax-credit transaction is between 45% and 75% of the development costs (FRBD, 2009). The yields on tax credit investment in recent yearls are about 5% to 7% (FRBD, 2009).

How LIHTC Works

The annual amount of the tax credits is calculated by multiply the “eligible basis” by 4% or 9%. Projects for new construction and the cost of rehabilitating an existing building, if not funded by tax-exempt bonds, can receive a maximum annual tax credit allocation of 9% of the project's eligible basis. The cost of acquiring an existing building (but not the land), and projects financed in whole or in part with tax-exempt bonds, are eligible for a credit of 4% of the eligible basis.

The LIHTC is a program rooted in partnership. Investors include financial institutions and corporations, and sometimes individuals[2] purchase tax credits to lower their tax liability. Project sponsors usually "sell" the credits by entering into limited partnerships (or limited liability companies) with an investor, with 99.99% of the profits, losses, depreciation, and tax credits being allocated to the investor as a partner in the partnership.[3] The developer serves as the general partner/managing member, and receives a majority of the cash, which is usually used to cover the debt service and operating cost. The funds generated through the syndication vary from market to market and year-to-year. An investor will typically stay in the partnership for at least the compliance period, which requires the project be affordable for usually at least 10 years. If an investor wants to exit before the end of the compliance period, it will have to pay for a recapture of the profits.

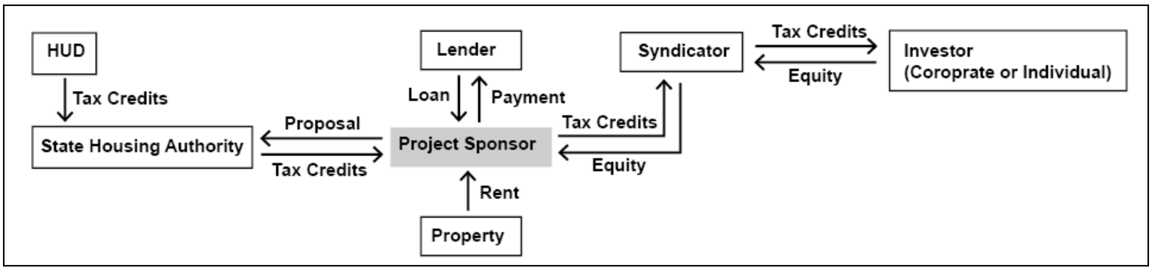

Figure 3-1 How LIHTC Works

[2] Due to the restrictions on the use of tax credits by individual investors, the majority of tax credit investors are corporate investors.
[3] Although the project sponsor can sell the tax credits by itself, due to the experience limitation, it usually hires a syndicator to sell the tax credits to investors. A syndicator can be a private firm, a statewide equity fund, and a national organization specializes in raising capital for nonprofit projects.

Sample LIHTC Calculation
Development cost
−ineligible costs (land acuisition, permanent financing fees, marketing, ect)
−federal support [4]
× low-income rate (% of qualified units.)
= eligible basis
× tax credit rate[5]
= available tax credits
×equity price per credit on open market[6]

= equity raised by tax credits

3.2.2 HOPE VI Program

The HOPE VI Program was developed in 1993 following the recommendations by the National Commission on redeveloping Severely Distressed Public Housing.[7] According to HUD's latest HOPE VI NOFA, the total grant amount for fiscal year 2010 is $113 million (HUD 2009).

Besides the goal of physically redevelop distressed public housing, the HOPE VI program also focuses on encouraging mixed-income and mixed-financing, and partnerships among "local governments, nonprofit organizations, and private businesses to leverage support and resources". [8]

The mixed-financing enables housing authorities to put HUD money into privately-owned properties and to leverage private funds (Popkin, 2004). The mixed-income development is aimed at solve the problem of poverty concentration, and to encourage low-icnome family to gain a better situation.[9]

Any Public Housing Authority that has severely distressed public housing units in its inventory is eligible to apply. The HOPE VI Revitalization grants fund:[10]

- Capital costs of major rehabilitation, new construction and other physical improvements
- Demolition of severely distressed public housing
- Acquisition of sites for off-site construction
- Community and supportive service programs for residents, including those relocated as a result of revitalization efforts

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[4] This is intended to avoid double federal subsidy.
[5] The actual tax credit rates are not exactly 9% or 4% annualy. Rates also vary on a monthly basis, fluctuation with federal borrowing costs. The tax credit rates are calculated and released monthly by the Treasury Department.
[6] This is a rate. Used to be 90 cents for a dollar tax credit, but now due to the shrinking needs for tax credit caused by the recession, it dropped to about 70 cents.
[7] HUD, *About HOPE VI*. http://www.hud.gov/offices/pih/programs/ph/hope6/about/
[8] HUD, *About HOPE VI*. http://www.hud.gov/offices/pih/programs/ph/hope6/about/
[9] It is believed that the mix of different income levels will help the low-income families to improve their condition.
[10] HUD, *About HOPE VI*. http://www.hud.gov/offices/pih/programs/ph/hope6/about/

FY	Planning	#	Implementation/ Revitalization	#	Demolition Only	#	Total	#
1993	1,000,000	2	299,000,000	6			300,000,000	8
1994	2,725,472	6	752,674,507	20			755,399,979	26
1995	10,726,609	27	349,999,018 (1st round)	8			496,877,472	40
1995	300,000 (amendment)		103,257,000 (2nd round)	5				
1995			32,594,845 (amendments)					
1996			403,463,070	20	69,571,850	22	473,034,920	42
1997			497,355,108	23	955,000	4	498,310,108	27
1998			507,000,000	22	57,084,319	50	564,084,319	72
1998E			24,565,222 (elderly)	6			24,565,222	6
1999			571,287,001	21	40,738,389	32	612,025,390	53
2000			513,805,464	18	49,994,536	26	563,800,000	44
2001			491,774,238	16	74,964,992	43	566,739,230	59
2002			494,267,265	28	42,379,319	41	536,646,584	69
2003			447,750,000	24	59,634,870	69	507,384,870	93
2004			126,884,932	7			126,884,932	7
2005			156,895,528	8			156,895,528	8
2006			71,900,000	4			71,900,000	4
TOTAL	14,752,081	35	5,844,473,198	236	395,323,275	287	$6,254,548,544	558

Table 3-2 HOPE VI Funding History
Source: HUD. http://www.hud.gov/offices/pih/programs/ph/hope6/about/fundinghistory.pdf

3.2.3 Block Grants

The Community Development Block Grant (CDBG), 1974

The Community Development Block Grant (CDBG) program was firstly launched in 1974. It is characterized as giving communities plenty of flexibility to meet a variety of community development needs.[11]

The CDBG program provides annual grants on a formula basis to 1,225 general units of local government and States.[12] Big cities that have more than 50,000 population, or metropolitan areas or counties that have more than 20,000 population, can receive 70% of the CDBG funds; other 30% is

[11] HUD. *Community Development Block Grant-CDBG.* http://www.hud.gov/offices/cpd/communitydevelopment/programs/
[12] Ibid.

received by the state governments and then allocated to smaller cities (Schwartz, 2006). According to HUD, in the fiscal year of 2008, about $36 billion CDBG grants were allocated.[13]

In order to get rewarded the CDBG funds, the communities are required to prepare a consolidated plan to show the needs and proposed use of funds. The planning process also requires public participation.

HOME Investment Partnership, 1990

Created by the 1990 Cranston-Gonzalez National Affordable Housing Act, HOME is the largest Federal block grant to State and local governments designed exclusively to create affordable housing for low-income households. The program targets people earning up to 80% AMI (home ownership) and 50% to 65% AMI (rental housing). The funds can be used for home mortgage assistance, renter subsidy, rental housing development, and owner-occupied rehabiliation.

HOME provides grants to states and localities on a need-based formula basis, with an annual budget around $2 billion. The state gets 40% of the funds and the cities get 60% (Schwartz, 2006). Similar as HOPE VI, it also encourages partnerships, especially with local nonprofit organizations. It is required that no less than 15% of the HOME funds be allocated to community-based nonprofrit organizations.

NSP, 2008-2009

In order to stress the foreclosure problems in the recent recession, the Neighborhood Stabilization Program (NSP), as part of the CDBG program, was established to stabilize the community by purchasing and redeveloping foreclosed and abandoned homes.[14]

1) NSP 1, 2008

NSP1 refers to the NSP funds authorized under the Housing and Economic Recovery Act (HERA) of 2008. Under NSP 1, HUD allocated $3.92 billion on a formula basis to 309 grantees including 55 states and territories and 254 selected local governments. The program was designed to stabilize communities across America hardest hit by foreclosures.[15]

[13] HUD. *Community Development Block Grant Formula Allocations for FY 2008.* http://www.hud.gov/offices/cpd/about/budget/budget08/
[14] HUD. *Neighborhood Stabilization Program.* http://www.hud.gov/offices/cpd/communitydevelopment/programs/neighborhoodspg/
[15] Ibid.

2) NSP 2, 2009

NSP2 is a product of the American Recovery and Reinvestment Act (the Recovery Act) of 2009. Under this program, $1.93 billion is going to be allocated on a competitive basis to states, local governments, and nonprofit organizations. There is also an additional $50 million funds available for grantees for technical assistance. [16]

3.2.4 Inclusionary Zoning

Inclusionary zoning, also known as inclusionary housing, is to require new developments to make a certain percentage of their units affordable to low and moderate income households. Most inclusionary zoning is enacted at the municipal or county level, but sometimes it is carried out by the stage, such as Massachusetts. Through development incentives, such as FAR bonuses, developers are encouraged to play an active role in producing mixed income communities and housing. Any appropriate inclusionary housing policy is best created through consultation with all of the relevant stakeholders such as government, citizens, developers, etc (Mehdavi 2009).

3.2.5 Tax-Exempt Bond Financing

Tax-exempt bonds are issued by municipal, county, or state housing finance agencies (HFAs).[17] By exempting interest on these bonds from federal income tax, government agencies can pay lower interest rates to investors and use the proceeds of the bonds to finance low-interest mortgages.

3.2.6 Housing Trust Funds

Housing trust funds are established by government, on multiple levels such as state, county, and municipal. A housing trust fund are usually has a dedicated funding source, and are targeted to low- and moderate- income households (Connerly, 1993 and Brooks, 2002). Trust funds are usually administered by governmental or quasi-governmental agencies operating under the guidance of a board (Schuwartz ,2006). The regulations and forms of subsidies provied by the trust funds vary greatly.

[16] HUD. *Neighborhood Stabilization Program.* http://www.hud.gov/offices/cpd/communitydevelopment/programs/neighborhoodspg/

[17] Every state has at least one housing finance agency, most of them were founded during 1960s through 1980s.State housing finance agencies issue housing-related bonds, administer the federal LIHTC program and state housing trust funds.

3.3 Partnership Analysis

3.3.1 Why Partnership

The core of the partnership concept could be seen as a joint effort between the public and either the private for-profit or private non-profit entities. Each participant shares risks and responsibilities (CMHC, 1998). There are three key benefits of the partnership approach:

• Access to more resources, such as funding and expertise from different providers, and the effective use of those resources.

• Public participation to make sure people's needs are well met.

• Improve regulation and administrative structure to ensure fairness and transparency.

The participants of the partnership include but are not limited to: government agencies, quasi-governmental organizations, developers (for-profit and nonprofit), community development corporations, nonprofit organizations, philanthropies, financial institutions and other investors. The partnership takes place in each stage of the development process and applies to many geographical levels such as multi-state, state, municipal and local community levels.

The local community participation is especially important. According to the experience in many countries all over the world, the local knowledge and supervision that community participation provides can ensure that the project is well developed, and the needs of local residents are fairly met. The partnership approach can benefit affordable housing development in each step of the affordable housing development process:

- Project initializing
- Project approval
- Community participation
- Financing
- Construction
- Marketing
- Operation and Maintenance

3.3.2 Partnership Framework: The Key Players and Their Roles

The partnership framework in the United States is characterized as the active community-based nonprofit organizations and the whole institutional and governmental support system behind it. The key players include government agencies, quasi-governmental organizations, government sponsored enterprises, financial institutions, corporate and individual investors, developers, community development corporations (CDCs), philanthropies, and other large nonprofit organizations. Figure 3-2 shows the key players and their roles in each stage of the development process.

Although the US system has been criticized as being too complicated and thus not so efficient, the experience on the comprehensive partnership structure and the participation of the community-based organizations are still of great value.

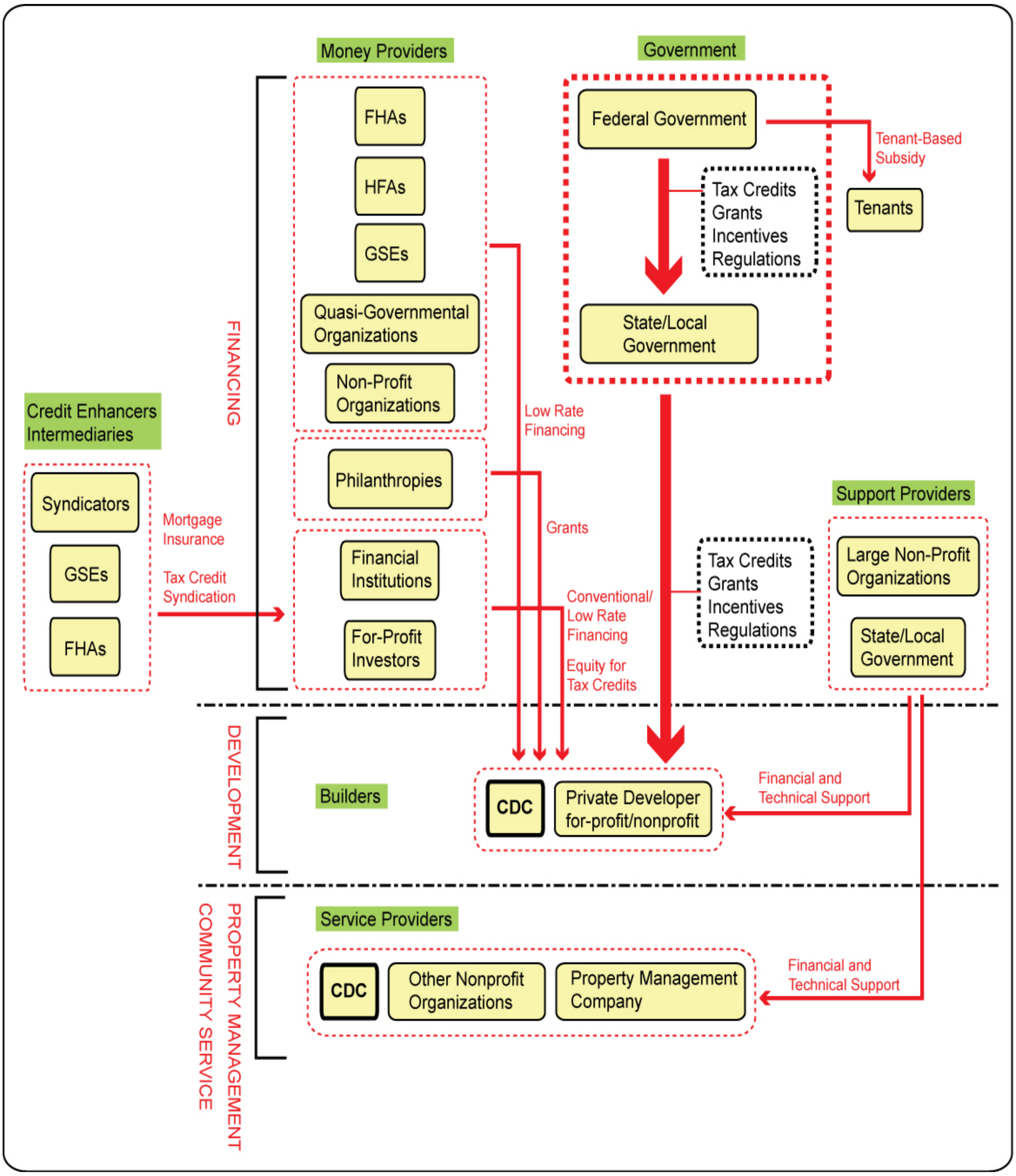

Figure 3-2 The U.S. Affordable Housing System

	Sector	Goals or Tasks	Geographical Levels
HUD	Public (federal)	Allocation of federal funds Administration	Nationwide
Governmental Agencies	Public (state and local)	Allocation of federal funds Administration	State and local
Governmental Sponsored Enterprises	Private	Mortgage insurance Low-interest financing	Nationwide
Quasi-Governmental Organizations	Public/Private	Provide support to CDCs	Multiple levels
CDCs	Private	Sponsor projects Community development	Community, neighborhood
Large Nonprofit Organizations	Private	Sponsor projects Community development	Multiple levels
Developers	Private	Sponsor projects Community development Make profit	Multiple levels
Investors	Private	Make profit	Multiple levels

Table 3-3 the Key Players and Their Roles

The Active Role of CDCs

Rooted in the local communities, the CDCs are dedicated to affordable housing development and community development. It was firstly formed in 1960s by the support of the federal government for the purpose of neighborhood revitalization, and then developed at a very fast pace through the 1980s and 1990s. Currently it is believed to be the largest part of the nonprofit housing sector. Besides the focus on affordable housing development, the CDCs also dedicate to a variety of social services such as economic development, job training and, of course, housing related services.

Schwartz (2006) stated that, there are more than 3,300 CDCs existing in the United States, with the median housing production of over 500 units. The CDCs vary greatly in sizes, with an average number of 6 staff. The smallest CDC only has one staff, while the largest CDC has more several hundreds of staff (Schwartz, 2006).

The primary funding sources for CDCs are the federal programs such as Community Development Block Grant (CDBG), HOME Investment Partnership program, and Low-Income Housing Text Credit (LIHTC) (Schwartz, 2006). The LIHTC enables CDCs to raise equity for housing development, therefore to act as project sponsor and conduct the affordable housing development process through partnerships with governmental agencies, nonprofit organizations, financial institutions and developers.

Following is an example of a typical CDC:

The Asian Community Development Corporation (ACDC)[18]

Founded in 1980s, based in Boston's Chinatown, the Asian Community Development Corporation is committed to serve the Asian American community of Greater Boston. The ACDC develops physical community assets including affordable housing for rental and ownership, as well as promotes economic development. As of 2008, there are 17 full-time employees and 22 volunteers and interns working at ACDC.

Revenues	
Contributions	$30,896
Grant Income	$114,317
Fundraising Income	$270,798
Fees and Programs Revenue	$160,592
Membership Revenue	$1,346
Net Assets	$43,500
Rental Income	$45,500
Interest and Other	$67,650
Total	$734,599

Expenses	
Personnel	$486,232
Community Planning	$88,104
Economic Development	$10,682.35
Real Estate	$385,946
CHOP	$82,951
Asset Management	$68,502
Youth Programs	$23,315
Interest and Other	$62,285
Administrative Expenses	$131,177
Communications & Development	$260,814
Total	$1,051,970

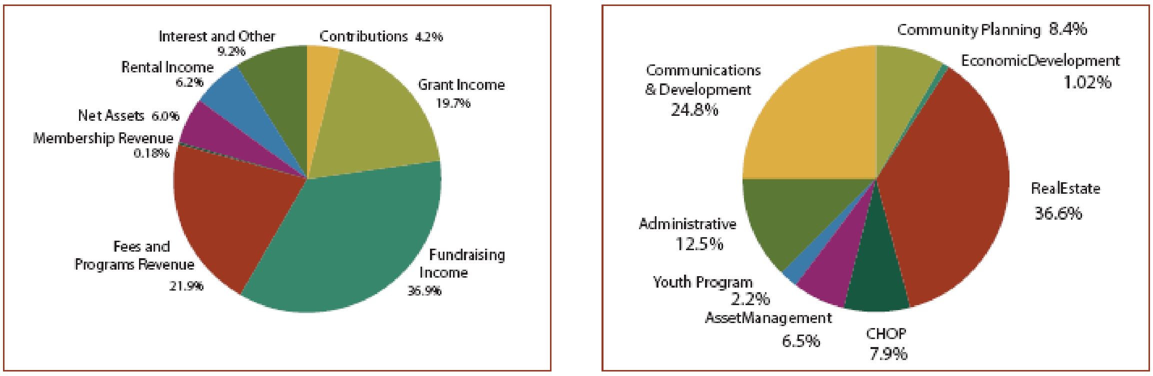

Figure 3-3 ACDC's Financial Information of 2008
Source: Asian Community Development Corporation 2008 Annual Report

The Institutional Support System

The partnership framework in the United States is characterized as the active community-based nonprofit organizations and the whole institutional and governmental support system behind it. The most important element of the support system is the national intermediaries such as the Local

[18] Asian Community Development Corporation. http://www.asiancdc.org/

Initiatives Support Corporation (LISC) founded in 1979, and the NeighborWorks America founded in 1981. These organizations provide financial and technical support to CDCs. For instance, they syndicate LIHTC, loans and grants for the affordable housing development sponsored by CDCs (Schuwartz, 2006).

U.S. Department of Housing and Urban Development (HUD)

HUD is the product of the U.S. Housing Act of 1937. Its mission is to "increase homeownership, support community development and increase access to affordable housing free from discrimination".[19] As the housing division of the federal government, HUD is responsible for allocating federal funds in the form of block grants and tax credits to state government, and oversees the performance of Federal Housing Administrations (FHAs) and Government Sponsored Enterprises (GSEs).

Federal Housing Administration (FHA)

FHA was created in 1934 after the recession to stimulate housing construction, create job opportunities and improve home ownership, it then became part of HUD. FHA provides federal mortgage insurance to lenders. In the case of default, FHA will reimburse the balance due on the mortgage and convey title of the property to HUD.[20] FHA has dramatically increased the credit availability for both home builders and home buyers (Schwartz, 2006).

According to HUD, nowadays FHA is still the largest mortgage issuer in the world, insuring over 34 million properties since its inception in 1934.[21] Moreover, because of the subprime crisis started in 2007, without the subprime mortgage market, the riskiest borrowers ended up borrowing from FHAs, Federal Home Loan Banks, and the currently government-owned Fannie Mae and Freddie Mac.

State and Local Housing Authorities

All states and some cities have their housing authorities. The core task of the housing authority is to develop and manage public housing, carry out federal housing programs, and allocate Low-Income Housing Tax Credits. Some housing authorities also have their own housing programs and funds available to local communities. Some of them also partner with other developers and organizations.

[19] HUD. *HUD's Mission.* http://www.hud.gov/library/bookshelf12/hudmission.cfm
[20] HUD. *FHA Frequently Asked Questions.* http://portal.hud.gov/portal/page?_pageid=73,1826504&_dad=portal&_schema=PORTAL
[21] HUD. *History of FHA.* http://www.hud.gov/offices/hsg/fhahistory.cfm

State and Local Housing Finance Agencies (HFAs)

Although they vary widely in characteristics, most HFAs are independent entities that operate under the direction of a board of directors appointed by each state's or city's governor. HFAs run various programs of affordable housing development and community development.

Quasi-Governmental Organizations

The quasi-governmental organizations are a very valuable complement to governmental agencies. They are usually concentrated on providing technical and funding support to affordable housing builders and consumers, and community initiatives.

The Massachusetts Housing Partnership[22]

Founded in 1985, the Massachusetts Housing Partnership (MHP) is a statewide quasi-governmental organization that has a close relationship with the Governor and the state's Department of Housing and Community Development.

MHP is known for its innovative affordable housing financing that leveraging private funds from the financial institutions. In 1990, the "Interstate Banking Act" in Massachusetts requires banks that acquire Massachusetts banks to make funds available to MHP for affordable housing. Massachusetts is the only state in the nation that has such regulations.[23]

In nearly two decades, MHP's loan pool has grown to over $1 billion. Through 2008, it has provided over $610 million in low-interest, long-term loans and commitments for the financing of over 15,000 rental units. MHP has also been supporting local housing initiatives in over 300 of the 351 cities and towns in the state with early technical assistance, long-term financing or by support of homeownership.

Government Sponsored Enterprises (GSEs)

The housing GSEs, which consist of Fannie Mae (the Federal National Mortgage Association), Freddie Mac (the Federal Home Loan Mortgage Corporation), and the Federal Home Loan Bank (FHLB) System, were created to provide liquidity and stability in the home mortgage market, thereby increasing the flow of funds available to mortgage borrowers. The three enterprises were established and chartered by the federal government, as privately owned entities. Their special legal status is government-sponsored enterprises (GSEs), which authorizes them tax and regulatory exemptions.

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[22] Massachusetts Housing Partnership. http://www.mhp.net/

[23] The Interstate Banking Act" requires any bank outside of Massachusetts pay 0.9% of the total acquisition amount to MHP when it is going to acquire a bank in Massachusetts. The funds will be used to issue low-rate financing to developers, consumers and community initiatives.

To investors, the debt issued and MBSs (Mortgage Backed Securities) guaranteed by the housing GSEs are more appealing. The government guarantee behind the GSEs means a subsidy is conveyed by the federal government through the GSEs (The Congress of the United States[CUS], 2001).

	1995	1996	1997	1998	1999	2000
Subsidies by GSE and by Source						
Fannie Mae						
Debt	1.7	1.5	1.8	3.2	3.3	3.6
Mortgage-backed securities	1.5	1.7	1.7	2.3	2.1	1.9
Tax and regulatory exemptions	0.3	0.4	0.4	0.5	0.6	0.6
Freddie Mac						
Debt	0.8	1.1	0.8	3.3	2.4	2.4
Mortgage-backed securities	1.0	1.3	1.1	1.1	2.1	1.8
Tax and regulatory exemptions	0.2	0.2	0.2	0.3	0.4	0.4
FHLBs						
Debt	1.2	1.1	2.0	2.6	4.5	2.8
Tax and regulatory exemptions	0.2	0.2	0.2	0.2	0.2	0.2
Total	6.8	7.4	8.1	13.5	15.6	13.6
Subsidies by Recipient						
Conforming mortgage borrowers[a]	3.7	4.1	4.0	7.0	7.4	7.0
Fannie Mae and Freddie Mac	1.8	2.2	2.1	3.9	3.9	3.9
FHLB stakeholders[b]	1.3	1.1	2.0	2.6	4.3	2.7
Total	6.8	7.4	8.1	13.5	15.6	13.6

Table 3-4 Federal Subsidies to the Housing GSEs, 1995-2000 (in billion dollars)
Source: The Congress of the United States, 2001

1) Fannie Mae and Freddie Mac

Fannie Mae was created as a government-owned corporation in 1938, and was turned into a GSE later in 1968. Fannie Mae's task is to issue debt and to buy and hold mortgages. Freddie Mac was created in 1970 as part of the Federal Home Loan Bank System. It bought mortgages, pooled them, insure them, and sold the mortgages in the secondary market to other investors, which is called "mortgage-backed securities" (MBS) (CUS, 2001).

In 2008, due to the subprime crisis, Fannie Mae and Freddie Mac suffered from severe losses and were taken back by the government.

2) Federal Home Loan Bank (FHLB) System

Created in 1932, the FHLB system was to "improve the supply of funds to local lenders that, in turn, finance loans for home mortgages". [24] The system is made up of a Finance Board, 12 banks, and many other member banks. The Finance Board is an independent agency. The U.S. government oversees the FHLB system through the five-member board. Of the five board members, four are appointed by

[24] Federal Housing Finance Board. *About FHFB.* http://www.fhfb.gov/Default.aspx?Page=2

the President for seven-year terms, and the fifth member is the Secretary of the Department of Housing and Urban Development, or the secretary's designee.

Today, the FHLB system has 8,104 member banks and forms a partnership that supports community-based financial institutions to have better access to credits.[25]

Large Nonprofit Organizations

Different from the CDCs, the nonprofit organizations usually focus on a larger geographic area. Besides directly developing and managing affordable housing, many large nonprofit organizations are also dedicated in providing technical and financial support to local communities.

The Local Initiatives Support Corporation (LISC)[26]

Founded in 1979, LISC is the largest national nonprofit organization that dedicate to community development support for distressed communities (Hecht 1994). LISC collaborate with governmental agencies, philanthropies and private enterprises to provide local community development organizations with:

- loans, grants and equity investments
- local, statewide and national policy support
- technical and management assistance

IN 2008	SINCE 1980
WHAT WE'VE INVESTED	WHAT WE'VE INVESTED
$826 million in low-income communities nationwide, including: • **$529.2 million** in equity • **$247.3 million** in loans • **$49.5 million** in grants	**$9 billion** which has leveraged: **$28.2 billion** in total development
WHAT WE'VE ACCOMPLISHED	WHAT WE'VE ACCOMPLISHED
• **15,218** affordable homes & apartments • **4 million** square feet of retail & community space • **18** schools financed for 8,805 students • **9** child care facilities supported for 692 children • **15** playing fields renovated for 30,000 kids	• **244,755** affordable homes & apartments • **36 million** square feet of retail & community space • **113** schools financed for 46,805 students • **154** child care facilities supported for 16,000 children • **205** playing fields renovated for 410,000 kids

Table 3-5 2008 and Historic LISC Investment
Source: LISC website

[25] Federal Housing Finance Board. *About FHFB.* http://www.fhfb.gov/Default.aspx?Page=2
[26] LISC. *About LISC.* http://www.lisc.org/section/aboutus/

Developers

There are two types of developers: for-profit and nonprofit. The for-profit developer could either be concentrated only in affordable housing, or be a mixed-income developer doing multi types of housing. The non-profit developer is a non-profit organization doing development. Following are two typical for-profit and non-profit developers.

The Trinity Financial Inc[27]

Founded in 1987, Trinity Financial is a Boston-based urban for-profit housing and commercial property developer dedicated to mixed-income and affordable housing development. Trinity Financial has expertise in residential and commercial development, from multi-unit housing to transit-oriented development. It has a portfolio worth more than $950 million, and has won awards in architectural design, historic preservation, smart growth and energy efficiency.

The key projects in their portfolio are two transit-oriented development projects, four HOPE VI projects, eight mixed-income housing projects, and two specialty housing projects.[28]

The Community Builders Inc[29]

Over 40 years, the Community Builders Inc (TCB) has grown from a Boston neighborhood-based organization to the nation's largest nonprofit urban affordable housing developer, with an annual budget of $40 million and about 500 staff nationwide in 13 states and 100 staff in its head quarter in Boston.

TCB specializes in large-scale affordable housing development, including both new construction and redevelopment of distressed public housing. It collaborates with communities, public and private entities, and philanthropies in developing, financing, and operating affordable housing. It also provides community support and development services.

TCB has completed 298 affordable and mixed-income projects in the nation's 14 states, with over 22,000 housing units and 420,000 square feet of commercial and retail space. It has assembled over $2 billion funds. TCB also manages 8,000 units in 99 developments by itself. In 2009, there are about 2,000 units under development.

[27] Trinity Financial Inc. http://www.trinityfinancial.com/home.html
[28] One of their HOPE VI projects, the Maverick Landing, will be discussed in detail in the appendices.
[29] The Community Builders Inc. http://www.tcbinc.org/

Financial Institutions

The financial institution issues market-rate financing to gain interest revenue. But besides this, one other very important motivation for the financial institutions is to get *Community Reinvestment* credits. This refers to legislative requirements established under the *Community Reinvestment Act* (CRA) of 1977, which requires financial institutions to contribute to the affordable housing in the community where it is based by issuing low-interest rate loans to both home builders and home buyers.

Corporate Investors

The corporate investors are the for-profit enterprises who have tax liability to offset. Through purchasing tax credits at a discounted price, the corporate investors can offset the tax credit and have a gain of about 5% to 7% (FRBD, 2009). The corporate investor is one of the major equity providers of affordable housing development.

3.4 Summary: a Brief Comparison Study of the US and the Chinese Systems

	The United States	**China**
Forms of Governmental Participation	regulations, incentives direct or indirect subsidies	regulations, incentives, direct or indirect subsidies
Funding sources	Governmental agencies, GSEs Nonprofit organizations, philanthropies Financial institutions, private investors	Governmental agencies State-owned enterprises Developers
Governmental Incentives and Regulations	Tax incentives Community Reinvest Act Regulations Linkage fee (with FAR incentives) Inclusionary zoning (with FAR incentives)	Economic Housing program Public Rental Housing program 70/90 policy Limited price housing
Governmental Subsidies	Tax credits Grants Subsidized financing Land subsidy	Land subsidy Direct investment (for public rental housing)
Participants	Governmental agencies Quasi-governmental organizations Financial institutions Investors Developers CDCs Philanthropies Nonprofit organizations	Governmental agencies State-Owned Entities Developers
Project Sponsors	CDCs Developers	Governmental agencies Developers State-Owned Entities

Table 3-6 Comparison of the US and Chinese Systems

The partnership framework in the United States is characterized as the active community-based nonprofits sector and the whole institutional and governmental support system behind it.

In today’s China, the governmental-conducted approach today is very similar to the public housing era in the 1950s and 1960s in the United States. Although the socioeconomic, political and cultural environments are very different in the two countries, the problematic public housing policy and the later reforms of promoting the nonprofit sector and building a comprehensive partnership framework in the United States can be a good reference for China. It is highly possible that Chinese affordable housing system would adopt the similar evolution path, and see the flourish of the nonprofit sector and the partnership approach in the following one or two decades.

Chapter 4. The Shenzhen Case:

Urban Villages Corporations as "Community-Based Organizations"

Shenzhen is a direct product of the 1978 economic reform in China. In 1980, it was developed out of a small fishing village. The Special Economic Zone (SEZ) in the city was created to attract foreign capital, technology and management expertise. Shenzhen has a very active economy which rely heavily upon the migrant workforce, most of which is from rural areas. The urban village phenomenon is very typical for Shenzhen, and the urban village corporations (UVs) are very powerful and active economic entities. According to the Urban Village Redevelopment Plan 2005-2010 issued by the Shenzhen Planning Bureau (2005), the city government is going to overall redevelop the urban villages in the following decade.

The objective of this case study is to demonstrate that the urban village corporations have great potential to lead the key role in affordable housing development as a community-based organization.

4.1 The Urban Villages

4.1.1 Origin of Urban Villages

The formation of the urban villages is a product of the dual-track land ownership and administration of urban and rural area, and the over-paced urbanization process (Xie, 2005).

In China, the urban and rural areas are under different administration systems, and have different forms of land ownership. The urban area is ruled by the municipal government, while the rural area is ruled by the rural county and town government and village government. In the cities, the municipal government takes charge of the infrastructure construction, while in the rural area, the villages are on their own. The urban area and rural area are also under different planning systems that has different planning procedure, land use requirements and regulations. Furthermore, the urban and rural residents are registered in two different systems, which means the totally different social welfare conditions.

In terms of land ownership, the urban land is owned by the state, after the land reform in 1980s, the use right can be traded in the market; the rural land is collectively-owned by the village, the use right of which cannot be transferred. In each village, there is a certain amount of land allocated to the village as a whole for development use. Besides the collectively-owned land for the whole village, each individual household is allocated a certain area of home site for home construction. The allocation standards vary in difference places. As of Shenzhen, it is 100 square meters of home site area, and up to 480 square meters buildable area (Xie, 2005 and Li, 2008).

During the fast-paced urbanizations process, the villages are gradually surrounded by urban area and urbanized, and some of the land was purchased by the government for urban development. However, the government does not have enough money to take over all the land ownership, neither does it have enough power to reorganize the governmental structure. Therefore, most of the land in those urbanized villages remained the collective ownership, and the urbanized villages remained under rural governance.

When Shenzhen opened up in 1980, it was mostly just a collection of villages (Li, 2008). In nearly three decades, Shenzhen grew from a small fishing village to a huge city with a population more than 14 million.[1] In 2000, there were 241 urban villages with land area totaling approximately 43.9 square kilometers and total residents of 2.15 million (Song, 2009).In 2004, there were 319 urban villages, with a total built area of 93.5 square kilometers, total floor area of 10.56 million square meters, and 0.35 million residential buildings, which an average height of 3.23 floors, average density of 34.99%, and an average FAR of 1.13 (Peking University Shenzhen Graduate School [PUSG], 2005).[2] Now, it is believed more than 5 million people are living in urban villages.

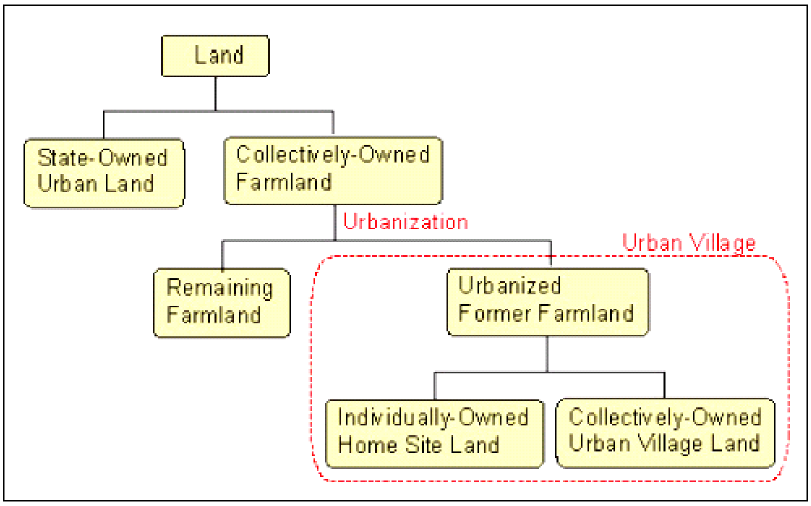

Figure 4-1 Origin of Urban Villages in Shenzhen

[1] According to the Shenzhen Statistics Bureau, the official number is only 4 million. But this is the number of registered local urban residents. Including those migrant workers and unregistered population, the total population is believed to be above 14 million.

[2] This is the overall average of the whole metropolitan area. The average within the SEZ is even higher. For instance, the average FAR in the SEZ is at least 2.6.

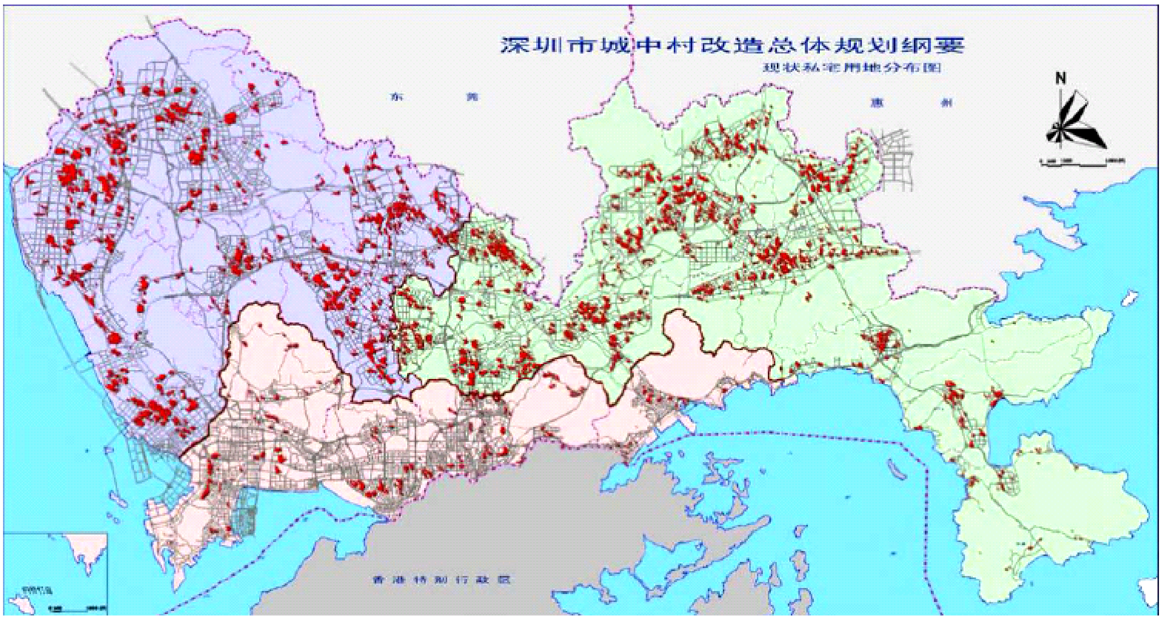

Figure 4-2 The Location of Urban Villages in Shenzhen
Source: Shenzhen Planning Bureau, 2005

4.1.2 The Role of Urban Village Corporations

After being urbanized, many urban village corporations (UVCs), which are usually limited liability corporations (LLCs), were founded in the urban villages to own and manage the collectively owned assets including land and properties. The UVCs are directed by a board elected by villagers. The assets are evenly divided into shares and allocated to each villager. Since the urban villages are not administered by the urban governmental system, they cannot get any public funding for infrastructure and social welfare. They urban villages are on their own, using the revenue of the UVCs to fund the infrastructure construction such as roads and sewage systems, to pay for community facilities such as schools and open spaces, and to cover the expenses of UVCS' operation and village administration. Besides the investment in the village, part of the revenue is used to issue dividend to share holders.

As a For-Profit Entity

The favorable location of most urban villages is the primary reason for the flourish urban village economy. The primary revenue sources are rent revenue of the land, the property, and other industrial and commercial business, of which the rental revenue accounts for the biggest share.

Name of Villages	Total Assets	Net Assets	Real Estate	% of Real Estate to Total Assets	% of Rental Revenue to Total Revenue
XZ	9,000	6,700	1,100	12%	68%
YN	5,839	2,271	1,630	28%	78%
HQ	20,124	11,927	9,657	48%	87%
SZ	15,087	9,145	9,654	64%	88%
XML	10,750	8,895	4,174	39%	91%
SX	11,371	8,704	5,300	47%	92%
GX	14,962	3,233	1,860	12%	95%
SW	16,307	5,678	6,927	42%	100%

Table 4-1 The Asset Amount of Some Urban Village Corporations in Futian District
Source: Asset Office of Futian District, unit: 10,000 RMB, collected by Tan in 2005

Rental housing is very profitable in urban villages. In 2005, the construction cost of a building around 700 to 800 square meters is about 500,000 RMB, while the average rent is about 20 to 25 RMB per square meter for residential use and 30 to 150 RMB per square meter for commercial use. The cost can be earned back in only 3 to 5 years (Xie, 2005).

Many urban village corporations are functioning very well, paying a decent salary to their employers, and issuing dividends to their share holders in a considerable amount every year. According to the data collected from urban village corporations in 2005, the annual dividend income per person ranges from 10,000 to 20,000 RMB a year, which means about 30,000 to 60,000 RMB per household (Xie, 2005).

Level	1	2	3	4	5	6	7	8	9	10	11
Title	President	Vice President	Board Member	Department Manager	Manager	Vice Manager	Accountant	Team Leader	Vice Team Leader	Clerk	Entry Level
Salary	6,320	5,860	4,810	4,280	3,740	3,280	3,020	2,680	2,520	2,040	1,410

Table 4-2 The Sample Salary Levels of an Urban Village, 1998
Source: Xie, 2005. Collected from an urban village corporation.

As a Community Administrator

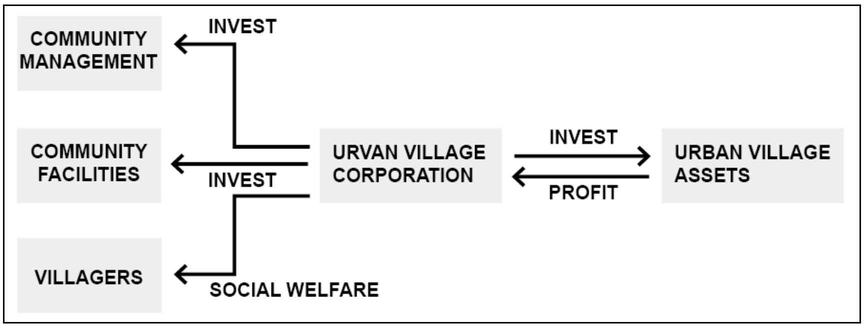

Figure 4-3 The Function of Urban Village Corporations

Instead of paying taxes to the government, the urban village corporations only pay taxes to the villages. Part of the tax revenue and other rental revenues will be used to pay for the dividends to share holders; another part of the revenue will be used to fund infrastructures, community facilities, and the daily management of the villages. The urban village corporations also take care of the social welfare for the original residents (the "owner" of the villages, not the migrant workers living in the villages).

For example, in Futian District, in 12 years from 1991 to 2003, the 15 urban village corporations invested 800 million RMB in the communities (Jiang, 2005). In terms of the community operational cost, in 2003, 13 urban village corporations in Futian District (excluding 2 corporations) spent 11.96 million RMB, among which the top spender spent 5.1 million RMB. There are several other corporations spent more than 1 million RMB (Jiang, 2005).

4.1.3 The Individual Economic Activities in Urban Villages

For the individual villagers, since they have lost their farmland during the urbanization, and the government did not offer any help on job finding, they have to rely on the rental revenue of the residential buildings[3] built on their home site land.

Most of the original villagers' monthly household incomes range between 10,000 RMB and 60,000 RMB (Xie, 2005), which is very high comparing to the average monthly income of 6,682 RMB in Shenzhen. The primary income sources for individuals are the rental revenue, the dividends issued by urban village corporations, and for people who are employed, the salary.

[3] Unlike the urban village corporations, who manage all types of properties.

Village Name	<5,000	5,000-10,000	10,000-30,000	30,000-60,000	60,000-100,000	>100,000
SS	<10%		About 80%		about 10%	
XS	2%		59%	39%	0	0
SB	5%	15%	15%	60%	5%	0
FT	0	10%	40%	40%	10%	0
TN	5%	10%	35%	40%	10%	0
GX	10%	10%	55%	20%	10%	0
SX	0	Small portion	medium	majority	3%	2%

Table 4-3 Monthly Rental Income of Urban Village Households (RMB)
Source: Xie, 2005. Collected from urban village corporations and residents' committees.

4.1.4 The Housing Affordability in Urban Villages

For people who are not eligible for official affordable housing programs, especially the rural migrant workers who are most likely to be low-income, the urban villages have been the major source of affordable housing. It is undeniable that urban villages have been contributing greatly to Shenzhen's economic growth.

Average Monthly Household Income	Monthly Mortgage Payment	Average Housing Price	Average Unit Size	Average Unit Price	Mortgage Principal	Mortgage Payment as of % of Income
6,218	6,034	13,370	90	1,203,300	962,640	97%
6,218	4,023	13,370	60	802,200	641,760	65%
6,218	8,045	13,370	120	1,604,400	1,283,520	129%
6,218	1,877	13,370	28	452,571	299,488	***30%***

Table 4-4 The Housing Affordability in Shenzhen
Source: Data from Shenzhen Statistics Bureau

Family Member	Median Monthly Household Income	Mean Monthly Household Income	Average Rent	Monthly Rent Payment/Median Monthly HH Income
Head	2,000	2,749		
Partner	1,500	2,082		
HH Total Income	**3,500**	**4,831**	**632**	**18.06%**

Table 4-5 The Housing Affordability in Urban Villages
Source: Data from Li, 2008

The tables above are a comparison between the market-rate housing affordability and urban village housing affordability in Shenzhen. In the urban villages, given the average monthly household income of 3,500 RMB (Li, 2008) and the average unit rent of 632 RMB, we can calculate that the monthly rent payment is only about 18% of the monthly income, which shows a very satisfactory affordability.

4.1.5 Planning and Housing Quality

Although quite affordable, the urban village housing is always below normal standards.

No Planning Regulations

Due to the dual-track administration system, the planning of urban villages is not regulated by the city planning bureaus. Instead, it is under the control of villages. Therefore, without clear regulations, for the lack of expertise and the motivation of maximizing built area in thus to get more rental income, the urban villages are planned in a very dense way.

Because most of the land in urban villages was allocated as individual home site, the typical layout of an urban village is a grid system in the dimension of approximately10 meters by 10 meters. For instance, the home site allocated in 1979 was 12 meters by 12 meters, with a 3 meters front-back distance and a 2 meters left-right distance. However, when building the houses, the villagers made the distance even less, sometimes as narrow as less than one meter (Jiang, 2005). The major roads are often 5 to 6 meters wide, the alleyways are often 1 to 3 meters wide. The average FAR in the villages is 2.5, and the tallest buildings reach 20 floors (Xie, 2005).

Figure 4-4 Typical Urban Village Layout and Building Distance
Source: Google Earth (left), by author (right)

Inadequacy of Infrastructure and Management

Many of the urban village corporations only build the basic infrastructure such as roads and fundamental sewage systems. The richer villages are able to spend more on trash collection, daily cleaning, fire control, safety administration, and build more open space and community facilities such as activity center, schools, and even museums. However, for those poor villages, there are often environmental issues and even safety issues due to the lack of infrastructure and daily management.

Sub-Standard Housing

The migrants live in the substandard housing in urban villages. Given the average unit size of about 30 square meters and the average population of three for each household (Li, 2008), the average floor area per person in urban village housing is only 7.7 square meters, which is less than half of the average floor area per capita in Shenzhen (about 19 square meters in 2006).

Among those families or individuals who share with others, the average floor area per person is about 8 square meters. Most of them are sharing with 2 other people (Li, 2008). Among those families that have their exclusive unit, the average housing floor space per unit is about 40 square meters, while average floor space per person is about 15 square meters (Li, 2008), which is much less than the city average.

Figure 4-5 Inside the Urban Village Rental Housing
Source: Wang, 2009

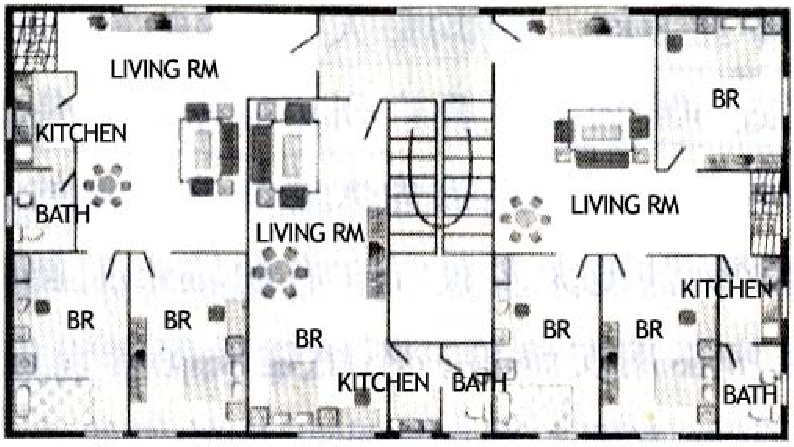

Figure 4-6 Typical Floor Plan of Urban Village Apartments
Source: Xie, 2005

4.2 The Current Urban Village Redevelopment Models and Case Studies

4.2.1 The Top-Down Urban Village Redevelopment plan

In 2005, the Shenzhen Planning Bureau made a redevelopment plan for the period of 2005-2010. According to the Outlines of Urban Village Redevelopment Plan by the Shenzhen Planning Bureau in 2005[4], the goals are:

- Before 2010, demolish 20% of the urban villages in the SEZ and 5% outside SEZ.
- Improve the environmental safety: fire protection system, sewage and sanitary system.
- Improve the infrastructure system.
- Put in public funds, and try to attract private investments.
- Improve the service facilities such as schools and hospitals.
- Improve the quality of open spaces.

Names of Districts		**Luo Hu**	**Fu Tian**	**Nan Shan**	**Yan Tian**	**Bao An**	**Long Gang**	**Total**
Demolishing Land Area		30	40	80	30	410	300	890
Demolishing Floor Area		80	130	200	40	400	300	1,150
Total Rebuilding Floor Area		145	190	365	110	1,030	750	2,590
Rebuilding Area Breakdown	100	125	310	90	920	670	2,215	
	15	35	20	5	10	5	90	
	30	30	35	15	100	75	285	
Modification Area		570	540	520	60	860	820	3,370

Table 4-6 Redevelopment Guidelines in 2005-2010, unit: 10,000 square meters
Source: Shenzhen Planning Bureau

[4] Shenzhen Planning Bureau. http://www.szplan.gov.cn/main/csgh/czcgz/ztghgy/20051109011737.shtml.

4.2.2 Conducted by Government

In the city's urban village redevelopment plan, urban villages were considered as undesirable and threats to the city and need to be completely redeveloped. The plan is not successful because, firstly, it neglects the importance of urban villages in providing affordable housing for migrant workers and other low-income people. Without the urban villages, the government fulfill this task all by itself. Secondly, the land acquisition costs for purchasing urban villages owned land and properties and relocating villagers is a huge burden to the government. For instance, in Baoan District, it cost the government 134 million RMB to acquire just three urban villages.

Recently, the Shenzhen government has realized the problems. In the Shenzhen 2020 comprehensive plan, the city government tries to improve the former arbitrary redevelopment plan by adopting different strategies for two types of urban villages: (Shenzhen Planning Bureau 2008)

- For villages with extremely bad conditions, the plan calls for complete redevelopment.
- For villages with endurable conditions, the plan will carry out partially redevelopment by adding more public facilities and improving the building standards.

Furthermore, the government started to encourage innovative partnership approaches in urban village redevelopment projects, especially the involvement of urban village corporations.

4.2.3 Conducted by Developer

This is the primary mode ongoing today. Developers purchase land from urban villages, and change the landownership to urban ownership. Due to the high land acquisition costs, the new development is always shifted to higher-end uses, with a much higher density, and the migrant tenants are often relocated. For instance, in the redevelopment of Yunong Village, about 40% of the new constructed units are used to compensate the original villagers. The developer doubled the FAR in order to make profits (Song, 2009).

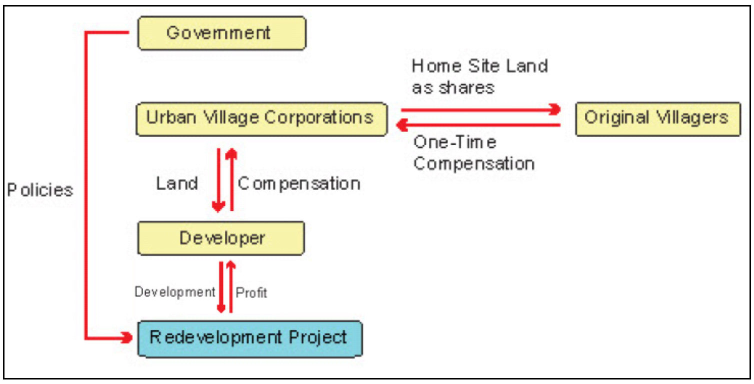

Figure 4-7 Urban Village Redevelopment Conducted by Developer

Case Study: Gangxia Village Redevelopment, 2006

The Gangxia Village is located near the city's CBD, occupying 9% of the central city area. There are currently 478 families of residents, with a total population of 68,000 (only 1,153 local villagers). There are 552 buildings (63 buildings are collectively-owned by the village), a gross built area of 550,000 m2, an average FAR of 3.2. The vacant land area is 3.7 Ha (16% of the total land area).

The project was conducted by the Gemdale Group. The new program consists of commercial, office, and market-rate residential uses. After the development, the on site population will decrease to only 7,000. Except for the housing compensated to the original residents, all the newly built housing is market-rate. The whole process will take up to 5 years, and will cost about 9 billion RMB.

Figure 4-8 Gangxia Village, Before Redevelopment
Source: Kerry, 2009. http://www.garlap.com/blog/article.asp?id=624

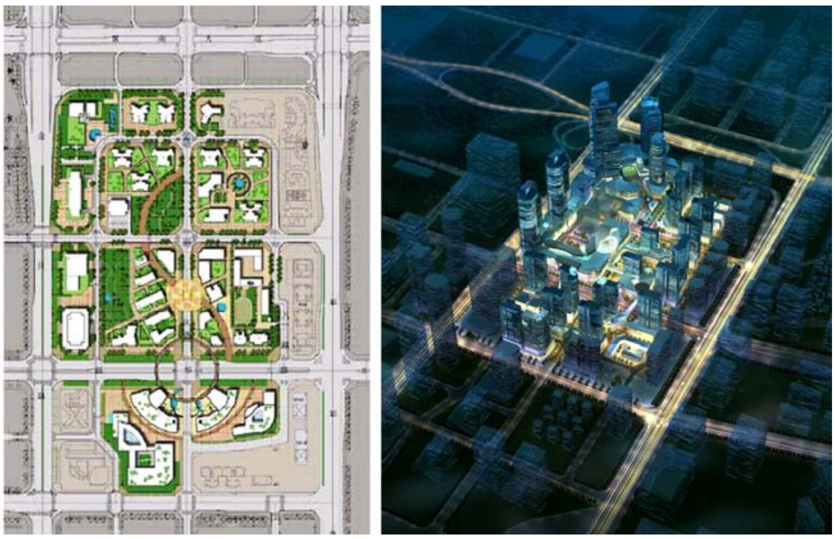

Figure 4-9 Gangxia Village Redevelopment: Site Plan and Rendering
Source: http://www.hygj.cn/upload/200781540655741.jpg

Total Buildable Land Area	23.2 Ha
Total Built Area	15.16 Ha + 1 Ha school land
FAR	4.5
Total Built Area	682,000 m2
Total Footprint Area	90,000 m2
Building Coverage	52.5%
Green Space (Excluding rooftop)	20%

Classification		No. of Buildings	Built Area
Total Demolishing: 525,000 m2	Private Property	489	410,000 m2
	Collectively-Owned Property	63	115,000 m2 Shops: 20,000 m2 Factory: 42,000 m2 Housing: 50,000 m2 Other: 3,000 m2
Demolishing for Roads Construction		103	92,000 m2

Land Use	Built Area	Percentage
Commercial:	204,000 m2	30%
Office:	123,000 m2	16%
Residential:	355,000 m2	52%
Total:	682,000 m2	100%

Demolish/compensation	1:0.75
Total investment	2.693 billion RMB
After tax profit	306 M RMB
After tax rate of return	12.01%

Table 4-7~4-10 Gangxia Village Redevelopment: Project Numbers
(from upper left to lower right): Buidable Area, Demolishing & Compensation, Program, Return
Source: Shenzhen Planning Bureau.
http:// www.szplan.gov.cn/main/czcgz/zhxgh/200605250203771.shtml

Figure 4-10 Gangxia Village Redevelopment: Site Model and Project On-Site Meeting

4.2.4 Conducted by Urban Village Corporation

The better off urban villages have the ability to conduct the redevelopment projects on their own. In this mode, the original villagers contribute their home site land as shares to the urban village corporation. The urban village corporation funds the development project. The ownership of the built property will be split among the share holders, and the future revenue will be allocated to the share holders according to the amount of shares. The advantage of this mode is it to the most extent keeps the original community structure, and reserves the affordable feature of the rental housing.

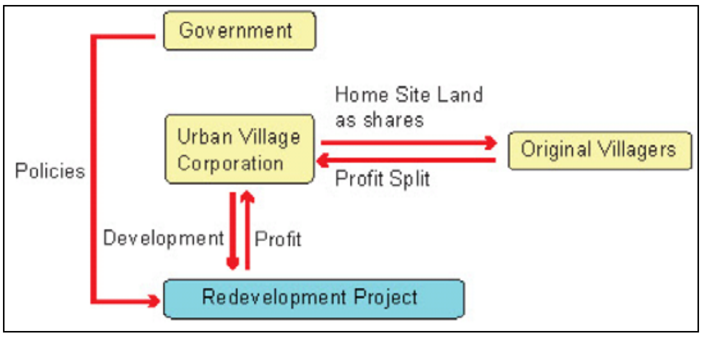

Figure 4-11 Urban Village Redevelopment Conducted by Urban Village Corporation

Case Study: Xiasha Village Redevelopment

Xiasha Village is a very wealthy village. In the redevelopment project, professionals were hired to do the planning and design. Street front shops were renovated, rental housing was upgraded. There is a community center that consists of a museum, a library and a kindergarten. The village also built a swimming pool and a neighborhood park with a large playground.

Figure 4-12 Pictures of Redeveloped Xiasha Village
From upper left corner to lower right corner: site plan, planning rendering and model, community center, inside the museum, open space, playground

4.2.5 The Informal/Underground Economy

In some cases, developers or individuals will buy land from the urban village corporations or from the villagers directly. However, this is illegal because the collectively-owned land should not be traded in the market. Upon completion, the properties are sold in the underground market at a big discount (usually 50% of the market price). Due to the illegal feature, the buyer cannot get a mortgage, the only way is to pay in cash in lump sum (Xie, 2005).

4.3 Summary

4.3.1 Comparison of the US CDCs and Shenzhen Urban Village Corporations

	CDCs in the United States	**Shenzhen Urban Village Corporations**
Sector	Private sector	Private sector
For Profit or Nonprofit	Nonprofit	For-profit
Role in the Development Process	Project sponsor/partner	Project sponsor/partner
Management Responsibilities	Community management Community building Social services	Infrastructure Community management
Project Sponsor.	Yes	Yes
Land or Property Owner	No, or partially own	Yes
Mission	Affordable housing Community building	Making profits
Leadership	Elected by the members of CDCs (membership is open to all people in the community)	Elected by original villagers
Key Resources	Knowledge and connection of the community Governmental support	Knowledge and connection of the community Land ownership Financial power

Table 4-11 Comparison between CDC and Urban Village Corporation

The most important similarity is that both the community development corporations (CDCs) and the urban village corporations (UVCs) are rooted in the local community, and are closely involved in the daily community life. For instance, the UVCs are the actual administrator of the community, who takes charge of the daily operation and invest in community facilities.

The biggest difference is that the CDCs are nonprofit organizations dedicated to affordable housing development and community development, while the UVCs are for-profit entities driven by the goal of profit maximization. Therefore, although the UVCs are doing some community development tasks such as investing in community facilities and providing social welfare to the original villagers, the ultimate mission is not to build a better community for everyone, not to mention the task of building affordable housing (the housing in urban villages are all built to generate rental revenue). When providing public goods, the neglect of the majority of current residents, the migrant tenants, is the best evidence of the for-profit feature of urban village corporations.

4.3.2 Suggestions for Shenzhen: Potential of Urban Village Corporations

Urban village, as a product of the dual-track land ownership system and the fast-paced urbanization, is not a unique phenomenon in Shenzhen, but is happening all over China. Thanks to the active economy in Shenzhen, the Shenzhen urban village corporations are the most powerful ones in the nation.

Although currently being for-profit enterprises, the urban village corporations have the great potential to function as community-based organizations in providing affordable housing. Firstly, the urban village corporations are deeply rooted in the local community, with the local knowledge and strong local support. Secondly, as the land owners, if act as project sponsors, urban village corporations will not have to worry about the largest portion of the development costs: the land acquisition cost. Thirdly, to simply sell the land to the developer is not suitable for all villages, especially for those located in less desirable sites.

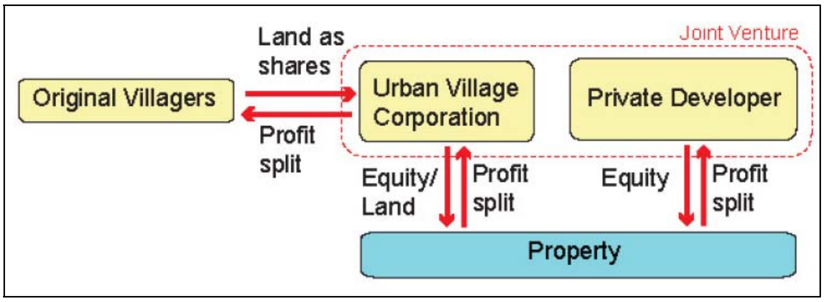

Figure 4-13 Suggested Partnership Structure for Shenzhen

As is shown in the above figure, since the biggest hurdle for urban village redevelopment is the high land cost and relocation cost, the most applicable solution could be the involvement of the land lord: the urban village corporations.

In this mode, a joint-venture may be established between urban village corporation and the developer. The urban village corporation contributes the land as shares. Each party in the joint-venture will hold a piece of the ownership of the property. The urban village residents who hold shares in the urban village corporation will then get dividends from the profit generated by the property. The revenue generated by the property can be used to pay for the management and operational cost.

However, we should be aware that, as a for-profit enterprise and for the lack of professional expertise, there are many problems of Urban Village Corporations (Xie, 2005):

- Overlap of the neighborhood committee and the corporation leadership.
- Lack of expertise.
- Unprofessional management and administration.
- Too local-concentrated, lack of communication with the outside world.

Therefore, further efforts should be made to improve the urban village corporations to modern enterprises, and more technical support should be in place. Furthermore, in order to save insure the supply of low-income housing, the city should place regulations and incentives.

Chapter 5. The Potential of Community-Based Partnerships in China

In the Shenzhen Case, the urban village was used as one example of the community-based organization. Going through the exercise of applying the partnership model for Shenzhen, it helps to make further recommendations for China.

5.1 Towards a Community-Based Partnership Approach

Given the fast-paced urbanization and urban renewal process, the affordable housing in urban China is in urgent need. However, besides all the efforts, with a top-down approach with lack of participants and little local community participation, Chinese affordable housing system suffers from problematic delivery, homogenous financing, poor transparency and lack of fairness, which eventually lead to huge supply-demand and affordability gaps.

By looking at the evolution of the U.S. affordable housing system, it is not hard to observe the similarities of the public housing era in the 1950s and 1960s in the United States and the affordable housing in today's China. The decades-long journey that the United States went through, and the later success of the community-based partnership approach, can be seen as a good reference for China. It is highly possible that Chinese affordable housing system would follow the similar evolution path, and see the flourish of the nonprofit sector, especially the community-based organizations in one or two decades.

The U.S. affordable housing system is featured as the following key components:

- The variety of participants, and therefore adequacy of resources in each stage of the development;
- The key role played by the community-based organizations; and
- The support system behind them.

Besides adopting the above principles of the U.S. experience, the major challenge for Chinese affordable housing system, is to find its own way to cultivate a partnership framework on the basis of its unique socio- economic and political environment, and the existing potential community-based organizations.

5.2 Potential Community-Based Organizations

5.2.1 Urban Villages Corporations

The urban village and urban village corporations (UVCs), which is a common phenomenon all over China, are products of the dual-track land ownership system and the fast-paced urbanization. For those communities in the urbanized villages, it is highly applicable to build upon the existing urban village corporation system, improve the UVCs into modern enterprises, establish partnership between UVCs and developers, and even governmental agencies (such as the residents' committees), and insure the housing affordability by placing regulations upon the UVCs.

5.2.2 Other Community-Based Organizations

Besides urban village corporations, there are great potentials for other community-based organizations. It can either be a newly established community-based nonprofit organization, similar as the community development corporations in the United States; or, according to the unique context of China, a government-affiliated organization based on existing governmental agencies such as the Residents' Committees. Employment-based organizations such as work units, and other individual-based organizations such as tenant association and housing co-operatives, can also be potential community-based organizations.

Factor	Description
Mission and Motivation	If the organization is dedicated to affordable housing development and community development.
Community Basis	If the organization is rooted in local community.
Governmental Support	If the organization has strong governmental support. For instance, as part of the government, neighborhood committee has the greatest potential for governmental support.
Negotiation Power	If the organization has the negotiation power in each stage of the development process, especially in land acquisition and project approval stages.
Regulation	If the organization is easy to be regulated. For instance, the governmental-related or big organizations are easy to regulate, such as the neighborhood organization, work unit, labor union (usually related to work unit) and large nonprofit organizations. The organizations consist of individuals, such as tenant association and coop are relatively harder to regulate.
Expertise	If the organization has the expertise of financing, developing, operating and managing affordable housing, and expertise in daily operation and management of the organization. The governmental-related, the large organization are tend to have more expertise, while the individual organizations are not.
Funding Availability	If it is easy for the organization to obtain funding support. For instance, it is relatively easy for the governmental related organizations to get governmental support. The philanthropies will have their own funding. For the urban village corporations, they have their own long-term revenue source.

Table 5-1 Key Criteria of Potential Community-Based Organizations

The Residents' Committee ("Ju Wei Hui")

There are five major levels of Chinese urban government: central government, provincial government, municipal government, district government, and sub-district government.[1] Under the sub-district government, the local communities are administrated by the "Residents' Committee" (RC).[2]

RC is a community-base organization which usually regulates a neighborhood of 100 to 700 households. The leadership team of RC is usually a president, a vice president and 5 to 9 committee members. Theoretically, RC is not a governmental agency, the committee members are elected by the community residents. However, the fact is that the RCs are usually regulated by the sub-district government. Therefore it can be seen as a government-affiliated organization. In China, since the non-profit sector has not yet grown extensive and strong enough to support the community development. It is possible for some government-affiliated organizations with similar service scope to play the roles of non-profit organizations (Bai, 2008). Rooted in community and backed by the government, the RCs are of great potential.

Work Unit: Re-Defining "Danwei" System

From the foundation of PRC to until the late 1990s, the Work Unit[3] system which consists of the state-owned enterprises (SOEs), used to be the basic social unit in China.[4] The SOEs provided housing and other social welfares to their employees, and act as the community administrators.

Despite the funding limitation in housing development, the work unit system actually did well in managing the community. Although it is not practical any more for the work unit to directly develop housing, it is of great potential to become a sponsor for the housing development for its employees, for its strong connection among its employees and its accessibility to many social and economical resources. If properly partnered with other parties such as developers and governmental agencies, it can make the deal happen.

Housing Co-Operatives

In a housing co-op, individuals gather to form a corporation, pool their own funds together to develop their own housing. Upon completion, the members will own their own homes. Sometimes, the shared

[1] Pronounced as "Jie Dao" in Chinese Pinyin
[2] Pronounced as "Ju Wei Hui" in Chinese Pinyin
[3] Pronounced as "Danwei" in Chinese Pinyin
[4] Nowadays, the social welfare system in China is still heavily employment-based. The employers, both state-owned enterprises and other private owned enterprises provide to their employees housing provident fund, healthcare, and other social welfare investment.

part such as public roads, passages and open spaces are owned by the co-op. The co-ops are very popular in the United States and many other countries, and already exist in China.

In China, the skyrocketing housing price is the most important reason for the emergence of co-ops. In 2003, the first co-op was established by an IT engineer named Linggang Yu (Wu, 2007). Today, there are many co-ops established and functioning in major cities all over China, with he numbers of members ranging from 200 to more than 5,000 (Wu, 2007). It is believed that the co-op mode can save up to 20% to 30% of the total construction cost (Zhang, 2007 and Wu, 2007).

Model 1: Individually conducted by co-op

The model Linggang Yu brought forward is that each person in the co-op contributes funding, and establishes a corporation to conduct the development.

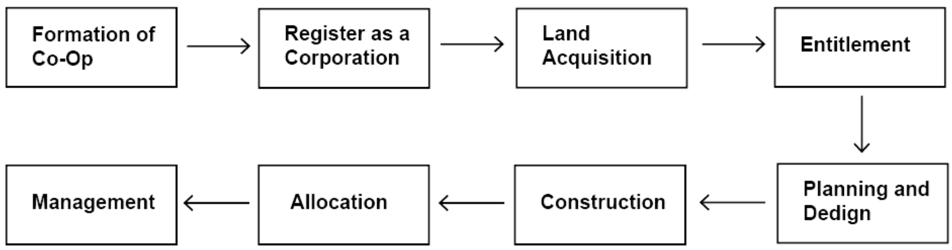

Figure 5-1 Development Process of Linggang Yu Mode
Source: adopted by author from Wu, 2007

As an individual-based organization, the biggest difficulties of this model are:

- Lack of negotiation power in land acquisition and other development stages
- Lack of financing resources
- Lack of expertise
- Lack of political power
- Hard to be regulated, and hard to coordinate among members

Due to the above reasons, until 2006, none of those co-ops had successfully acquired the land and started housing development. In 2006, in Wenzhou, another model was invented, which adopted the strategy of partnering with developers.

Model 2: partnership with developer

In 2005, in the city of Wenzhou in southern China, a co-op was established with a new idea of designating a developer to conduct the development. The development is fully funded by the co-op. The co-op pays a fee to the developer, which is 2% of the total development cost. In November 11, 2006, the designated developer successfully acquired a piece of land. The final housing price is estimated at least 30% lower than the area market price (Wu, 2007).

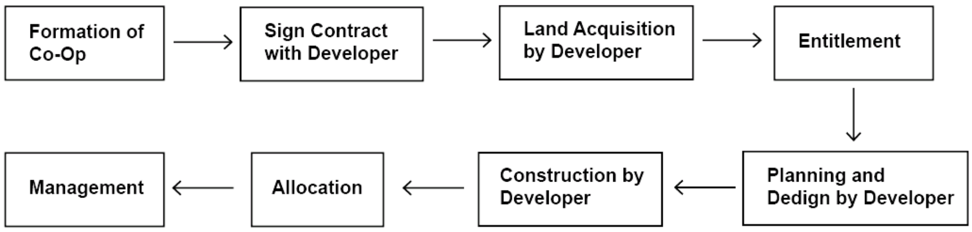

Figure 5-2 Development Process of Wenzhou Model
Source: adopted by author from Wu, 2007

The key to the success of this model is to utilize the expertise and negotiation power of the developer. In the future, with more governmental support, even governmental subsidy, the broader partnership with other parties such as financial institutions and other organizations are also very applicable.

Tenant Associations

A tenant association is usually made up of tenants who live in a certain building or development, or membership may be on a larger scale, for instance, renters in a city who belong to a county or citywide local tenants' association. These groups are formed and maintained with a number of goals including:

- Organizing and lobbying on behalf of tenants and tenants' rights.
- Improving tenant-landlord relationships, building conditions, and services for tenants.
- Encouraging regular communication and community awareness among tenants.

Tenant associations usually hold periodic meetings in order to encourage active tenant participation, and to promote tenants' awareness of the association's role and available services. There are also national organizations supporting tenant associations, such as the National Alliance of HUD Tenants.

In China, there is no tenant association. The renters in the cities are mostly very low-income people and migrant workers who are not protected and helped in any form. Therefore, it is very necessary to establish tenant associations for their sake.

Summary: Key Strengths of the Potential Organizations

The following table shows the key strengths of each organization. The marked cell means the organization is most likely to do well in this aspect, comparing to other organizations.

Name of Organizations	Key Strengths						
	Motivation	Community Support	Governmental Support	Negotiation Power	Regulation	Expertise	Funding
Urban Village Corporations		√		√			√
Community-Based Nonprofit Organizations	√	√				√	
Neighborhood Committee	√	√	√	√	√	√	
Work Unit	√	√	√	√	√		√
Tenant Association	√	√					
Co-op	√	√					√

Table 5-2 Key Strengths of Potential Organizations

5.3 Further Steps

5.3.1 Foster a Nonprofit Sector and Establish the Institutional Framework

Nonprofit Organizations

In the United States, the nonprofits sector plays a key role in affordable housing development. In China, there are only a small amount of nonprofit organizations, none of which is dedicated to affordable housing. The government should change its attitude towards the nonprofit sector, to view it as the beneficial complement to the government. Considering the limit of public sector, the profit driven of for-profit enterprises, the mission-driven feature of non-profit sector is of no doubt a precious resource.

Philanthropies

In the United States, there are more than 1.2 million philanthropic organizations, many of which contribute greatly to affordable housing. However, in China, there are only 100 philanthropies in 2007 (Wang, 2008), none of which has business in affordable housing. As the wealth grows, it is possible to encourage the enterprises and wealthy individuals to donate for affordable housing. Policies should be made to encourage the establishment of affordable housing related philanthropies.

Government-Affiliated Organizations

In China, due to the special political context, it is more realistic to establish some government-affiliated organizations. These organizations will operate individually as a nonprofit organization, but the support of the government insures the political power and negotiation power of the organization. For instance, it is possible to extend the function of the residents' committee (Ju Wei Hui) into affordable housing development.

5.3.2 Reform of Fiscal Finance System

The goal of the reform is to establish a revenue structure that can generate long term cash flow to the treasury. In China the current fiscal income relies heavily upon the land sale revenue, which can only generate a lump sum of revenue in every several decades[5] upon the land sales. One possible approach is to establish a property tax system in order to generate a stable cash flow in the long run, and eventually increase the fiscal income. By doing this, the government will have more funds to be allocated to affordable housing development.

5.3.3 Reform of Affordable Housing Policy

Through the reform, three major goals should be achieved. First is to improve the planning and design quality of affordable housing; second, policies and regulations should be made to insure the transparency of administration, and the accessibility of affordable housing to all groups in needs; third, incentives should be made to foster nonprofit sector, to leverage private sector resources, and to encourage partnerships among a variety of participants.

5.3.4 Innovative Financing System

An innovative, mixed-financing system is crucial to improve credit availability to both housing builders and buyers. In order to achieve this goal, efforts should be made in both public and private sectors.

Public Sector: Housing Finance Agencies

Currently, Chinese affordable housing programs are under the direct regulation of certain division in the municipal governments. The absence of housing finance agency has weakened the government's power to raise funds for affordable housing development. Housing finance agencies should be established to collaborate with other governmental agencies, community-based organizations, and financial institutions to piece together the funds.

Private Sector: Financial Institutions and other Investors

In the private sector, the financial institutions are now only involved in issuing construction loans to developers, and home mortgages to consumers. With proper regulations and incentives, it is possible

[5] In China, the land is owned by the state and cannot be traded. The land sale is the transfer of use rights for a certain period of time, which is 70 years for residential use, 50 years for commercial and industrial use.

to encourage financial institutions to partner with other entities, and to get involved in each stage of the development process. Besides the financial institutions, it is possible to create a channel for corporate or even individual investors to invest in affordable housing.

5.4 Conclusion

Although the Chinese affordable housing sector is now suffering from many complicated problems, the bright side is that there are already many existing community-based organizations and great potentials for partnerships. It is hoped that by adopting the key principles of the U.S. experience, China could be able to find its own way to cultivate a community-based partnership framework on the basis of its unique socio- economic and political environment; and eventually see the flourish of a comprehensive affordable housing system that provides decent housing as well as communities for all its people. In order to achieve this goal, future research should be conducted of a broader perspective as well as in more depth.

Appendices

Appendix 1 Case Studies: Sample Affordable Housing Development Projects

Case Overview

There are three cases, each of which shows the partnership structure and the different roles of entities in the affordable housing development process.

The Maverick Landing Project (Boston, MA, 2006) was sponsored by private for-profit developer Trinity Financials.

The Metropolitan Project (Boston, MA, 2006) was sponsored by Asian Community Development Corporation.

The Middleborough project's shows a possible way of the funding structure. In this project, we can see how MHP provides support for small, private for-profit developers.

Case 1: Maverick Landing Project by Trinity Financial

Figure Appendix-1 Maverick Landing: Project Location

Figure Appendix-2 Maverick Landing: Project Picture
Source: Anderson 2006

Developer Profile

Since 1987, Trinity Financial has been a for-profit developer dedicated to affordable housing development for decades. They are specialized in multi-unit housing and transit-oriented development. They have a project portfolio worth more than $950 million, and have won awards inn categories ranging from architectural design and historic preservation to smart growth and energy efficiency[1].

[1] Trinity Financial Inc. http://www.trinityfinancial.com/whoweare.html.

Project Facts

Developer: Trinity Financial, Inc. and East Boston Community Development Corporation

Sponsor: Boston Housing Authority

Architect: Icon Architect, Inc.

Major Funds:

- Apollo Housing Capital
- Department of Housing and Urban Development (HUD)
- Boston Housing Authority
- MassHousing
- Boston’s Neighborhood Housing Trust
- Massachusetts Department of Housing and Community Development
- Massachusetts Technology Collaborative

The project is a redevelopment of an eight-acre site, the old Maverick Garden public housing project in East Boston. Trinity Financial managed to fit 305 public housing apartments, replacing the original 413 units, into the rebuilt 426-unit community. The project is a mix of two midrise buildings and townhouses, with a density of 44 units per acre, which is about twice the density of a regular garden apartment development.

The price is reasonable, for instance, the market rate rental units is $2,400 of a four-bedroom apartment. The public housing units target people earning below 60% AMI, and there is a 3000-people wait list for 305 units.

Comparing to the common share of only one thirds of public housing in HOPE VI projects, Maverick Landing has a lot more public housing units. According to Albert Caldarelli, president of the East Boston Community Development Corporation, the agenda is to “preserve as many of the affordable public housing units as possible” (Anderson, 2006).

Social Services

Maverick project has a large Social service component. Using the saved construction cost of two million dollars, Trinity put together an on-site case management organization, which also collaborates with the property management company. The organization has five board members from East boston CDC, a person from housing authority, a tenant leader, a person from East Boston community, and a person from Trinity Financials. They hired a director and 3 staff people to run the organization.

Partnership Structure

Trinity Financials partnered with East Boston CDC to get the HOPE VI funding and the tax credits, and to get community support. Trinity takes charge in development and construction. Trinity also partnered with syndicator to sell tax credits for equity. After the completion of the project, Trinity put together an on-site case management organization for community services, and hired a property management firm to handle the day-to-day operation. The development fee is about 10%, which is split among several partners. Trinity takes away about 6%.

"Green"

Maverick was among the first apartment communities in the country to earn a Leadership in Energy and Environmental Design (LEED) certification from the U.S. Green Building Council. The apartments are 40% more energy-efficient than Boston building codes requires. Maverick received a $453,693 grant from the Massachusetts Technology Collaborative through its Renewable Energy Trust to help finance the green design features.

Unit Mix

Maverick project has 91 market rate rental apartments, 30 for-sale units: affordable to households earning 80% to 120% AMI, 305 units of public rental housing.

Funding Sources

Funding Type	Permanent Sources of Funds for Maverick Landing	Total	% of Total
Federal	Syndication Proceeds - Apollo Housing Capital LLC from Bank of America and Nationwide*	$51,516,327	39.99%
Federal	HOPE VI	$35,000,000	27.17%
City	Boston Housing Authority Replacement Housing Factor and Capital Funds	$13,414,496	10.41%
Quasi-governmental	Mass Housing Permanent Loan	$7,857,529	6.10%
	Revenue from Sale of Workforce Homeownership Units	$5,593,590	4.34%
State	Commonwealth of Massachusetts Affordable Housing Trust	$4,000,000	3.11%
City	City of Boston Neighborhood Housing Trust Funds	$3,900,000	3.03%
State	Commonwealth of Massachusetts Housing Stabilization Funds and HOME Funds	$3,000,000	2.33%
Federal	City of Boston Department of Neighborhood Development CDBG Funds	$2,500,000	1.94%
City	Boston Redevelopment Authority Linkage Funds for Workforce Homeownership	$1,560,000	1.21%
State	Massachusetts Technology Collaborative	$477,275	0.37%
	Total Permanent Sources	**$128,819,217**	**100%**
	**$3.48 M allocation of 9% LIHTC; nearly $2M allocation of 4% tax exepmt bonds*		
	Construction Sources of Financing		
State	MassHousing Construction Period Financing	$ 37,006,678	88.64%
Private	Bank of America Construction Financing for Workforce Homeownership	$ 4,741,937	11.36%
	Total Construction Sources	**$ 41,748,615**	**100%**

Table Appendix-1 Maverick: Sources of Funds
Source: Trinity Financial Inc.

For the permanent funds, Low Income Housing Tax Credit is the largest source, which accounts for about 40%. While the second largest source, HOPE VI funds, accounts for about 27%.

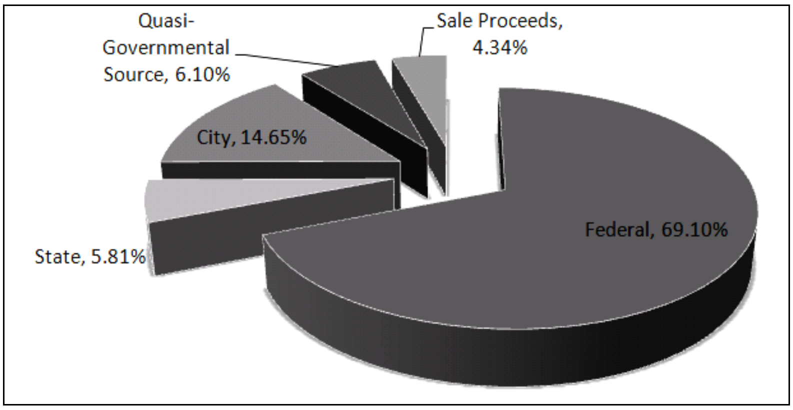

Figure Appendix-3 Maverick: Funding Breakdown
Source: adopted by author from information provided by Trinity Financial Inc.

Case 2: Metropolitan project by ACDC

Figure Appendix-4 Project Location **Figure Appendix-5 Project Picture**
Source: Googlemap, Asian Community Development Corporation, http://www.asiancdc.org

Project Facts

- Location: 38 Oak St, Boston, MA 02111, USA
- Developer: Parcel C LLC
  Asian Community Development Corporation
  Edward A. Fish Associates
- Architect: the Architectural Team Inc.
- General Contractor: Suffolk Construction Company Inc.

Project Introduction

ACDC partnered with for-profit developer Edward A. Fish Associates (EAFA) to complete development of The Metropolitan in 2004. The $89 million 23 story highrise project includes 251 rental and homeownership units, 115 (or 46%) of which are affordable to low and moderate income families. The 133 rental units have rents ranging from $365 for the formerly homeless to luxury units renting at $2,600 per month and the 138 for-sale condominiums sold at prices affordable to families earning 80% of area median income to prices in excess of $1 million for the penthouse units, the first in the neighborhood. ACDC successfully incorporated an extraordinary number of affordable units by capturing and capitalizing on the intrinsic value of the site’s desirable location in downtown Boston, access to a plethora of public transportation options, and existing diversity and density that allowed the market-rate condominiums to subsidize the affordable housing component.

Unit Type	# of Units	# and Types of Bedrooms	Affordability
Market-Rate Condominium	84	18 one-bedroom	Market-rate
		58 two-bedroom	
		8 three-bedroom	
Affordable Condominium	34	8 one-bedroom	26.5% at 80% AMI
		20 two-bedroom	47% at 100% AMI
		6 three-bedroom	26.5% at 120% AMI
Affordable Rental	52	8 one-bedroom	Up to 60% AMI
		20 two-bedroom	
		6 three-bedroom	
Market-Rate Rental	81	8 one-bedroom	Market-rage
		20 two-bedroom	
		6 three-bedroom	
TOTAL: 138 condos + 133 rentals, 115 (46%) units affordable			

Table Appendix-2 Metropolitan Project: Unit Mix and Affordability
Source: Asian CDC

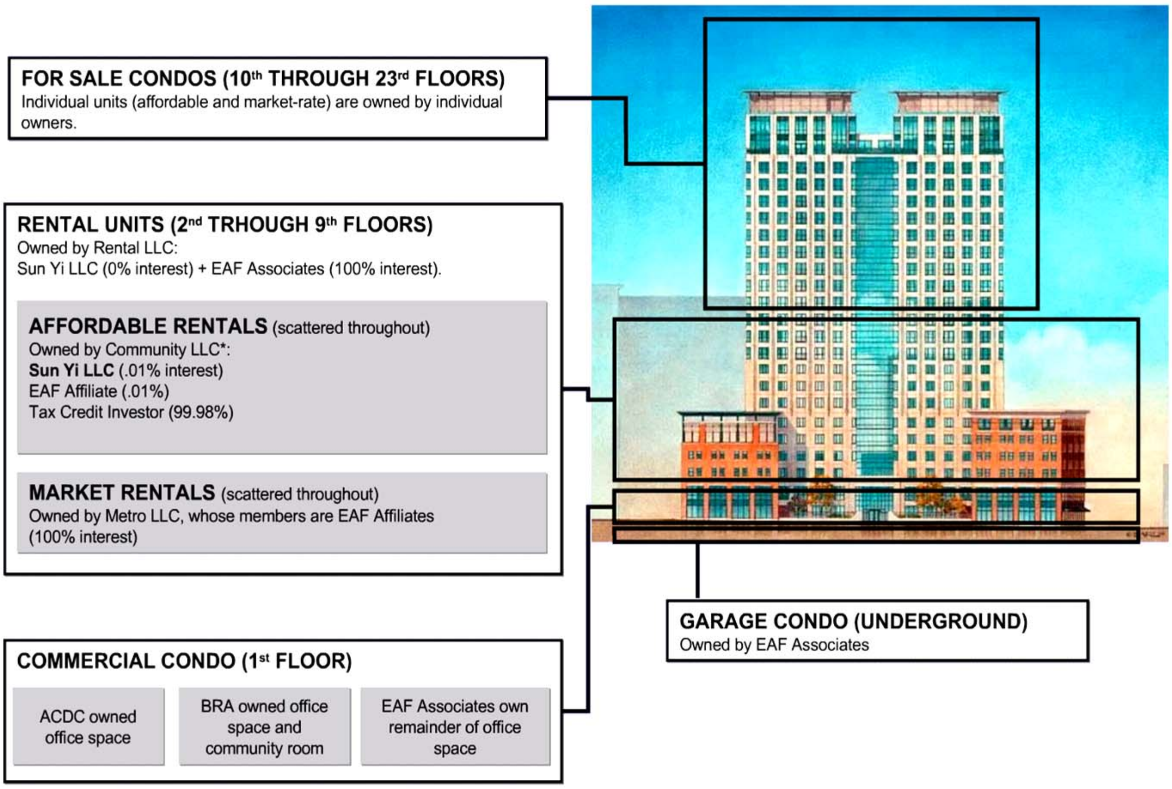

Figure Appendix-6 Metropolitan Project: Unit Mix and Affordability
Source: Asian CDC

Capital and Partnership Structures

Type of Capital	Sources of Capital	Amount of Capital	% of Total
Sale	Net Condominium Sales	$49,405,810	56.17%
Commercial	Perm Loan: Residential	$12,408,000	14.11%
Federal	LIHTC (Federal)	$7,748,024	8.81%
Sale	Net Parking Sales	$6,533,500	7.43%
Commercial	Perm Loan: Parking	$3,450,000	3.92%
City	Affordable Housing Trust	$2,000,000	2.27%
City	Linkage (Millenium)	$1,810,758	2.06%
City	City HOME	$1,500,000	1.71%
Sale	Net Commercial Sales	$1,304,135	1.48%
State	State HOME	$750,000	0.85%
City	BRA Funding	$750,000	0.85%
City	City Demolition Contribution	$300,000	0.34%
	Total Sources:	**$7,961,227**	**100%**

Table Appendix-3 Metropolitan Project: Sources of Capital
Source: Asian CDC

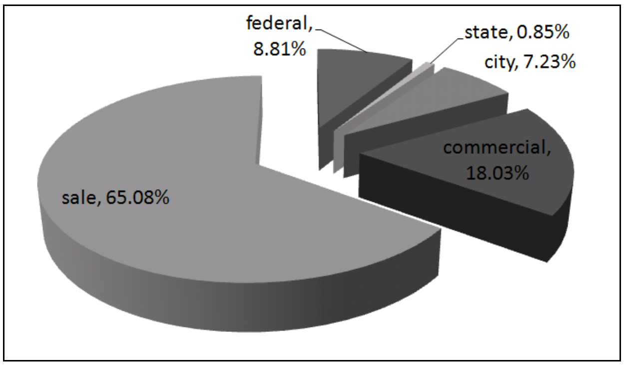

Figure Appendix-7 Metropolitan: Funding Breakdown
Source: adopted by author from information from Asian CDC

Partnership Structure

According to the capital sources, the majority of funding comes from the condo, parking, and other commercial property sales (65.08%) and the loans (18.03%), the rest of the funding was a joint contribution from the city and state government.

The major contributions are:

- HOME grants from both the city and the state.
- Linkage money
- BRA funding
- LIHTC
- Affordable housing trust

Case 3: Middleborough Project funded by MHP

Figure Appendix Middleborough: Project Picture
Source: Mass Housing Partnership 2009

Project Facts

The project was developed by Debbie Blais, a conventional real estate developer who had never done affordable housing development before. The town of Middleborough asked her to help build affordable housing.

MHP's Role

The developer wanted to build 110 condominiums on an 11-acre site but the town wanted the project to include some rental units, so the developer built 60 units of condos in phase 1, and came to MHP for help of funding for the rental units. MHP provided low-interest rate permanent financing, and a project eligibility letter for the developer to apply to the local zoning board for a permit for using Low Income Housing Tax Credit and other public funding sources.

Financing Analysis

Permanent Funding Sources	Amount	%	Rate	Term (year)	Amortization (years)
MHP	$ 1,740,000	23%	7.15%	20	30
Affordable Housing Trust Fund	$ 460,000	6%		50	
DHCD HOME Funds	$ 230,000	3%		30	
LIHTC Equity	$ 4,970,786	65%			
Borrower-Funded Escrows	$ 7,842	0%			
Deferred Developer Fee	$ 216,190	3%			
Total Permanent Sources	**$ 7,624,818**	**100%**			

Table Appendix-4 Middleborough: Permanent Funding Sources
Source: Massachusetts Housing Partnership

Uses	Amount	%
Acquisition Cost	$ 400,000	5.2%
Construction/Rehab	$ 5,098,800	66.9%
Soft Costs Excluding MHP Fees	$ 1,830,846	24.0%
MHP Financing Fees	$ 78,982	1.0%
Syndication Costs	0	0.0%
Deferred Developer Fee	$ 216,190	2.8%
Total Project Development Cost	$ 7,624,818	100.0%

Table Appendix-5 Middleborough: Uses of Funds
Source: Massachusetts Housing Partnership

		# of Bedrooms	Total Units	Vacancy Rate	% of Total Units
Type of Unit		2 BR	3	3%	8%
Secion 8 Certificate/Voucher	# of Units	3			
	Project Rents	$ 1,059			
	Max. Allowable Rents	$ 1,007			
DHCD Restricted at 30%	# of Units	2	2	3%	6%
	Project Rents	$ 307			
	Max. Allowable Rents	$ 306			
Tax Credit at 60%	# of Units	31	31	5%	86%
	Project Rents	$ 820			
	Max. Allowable Rents	$ 820			
Comparable Market Rents		$ 1,200			
Total Units		**36**	**36**	**5%**	**100%**
Average Unit Square Footage	950				

Table Appendix-6 Middleborough: Market Analysis
Source: Massachusetts Housing Partnership

Appendix 2 Interview Documentation

Overview

The interviews, which portrait the real situations, consist of individuals and entities both in China and in the United States.

In China, the interview with the urban village residents shows the living condition of the rural-urban migrants. The interview with Vanke's land acquisition manager shows the typical land acquisition process in China, and the particular case of Shenzhen.

In the United States, interviews are done with both non-profit and for-profit entities, including community development corporation (Asian Community Development Corporation), for-profit developer (Trinity Financial Inc), nonprofit developer (The Community Builders Inc), and a quasi-governmental organization (Massachusetts Housing Partnership).

Stories of the Migrants in Urban Villages

January 10, 2009

Bantian District, Shenzhen, China

Street front shop owner

This is a couple at their late 40’s. They are originally from Guangdong Province. They have farmland back at their hometown, and it is now leased to Hong Kong peasants. They have been in Shenzhen for more than a decade. They bought their shop, which is about 15 square meters, several years ago for 8,000 RMB per square meter. They are satisfied with their revenue and living condition. They have one teenaged child who is going to middle school.

Shop renter in the market

This couple is about in their 30s. They rent a small shop about 10 square meters in a market in an urban village. They are living with their two children, a son and a daughter, both under 10 years old. The family is originally from Henan Province. They used to have farmland in their hometown, but 30 years ago, the government took it away for reservoir construction and paid no compensation. Since then they worked in cities to earn their living. They went to Shenzhen 15 years ago and they’ve been vending in this market for about 5 years.

Due to the recent recession, they are having a hard time making money, sometimes the income is not even enough to cover the shop rent, which is about 1,000 RMB a month. The average living cost for the whole four person family is about 1,000 RMB per month. They live in the low quality rental housing in the urban village with a rent of 300 RMB per unit per month.

The two children are going to the good schools in the city, but they cannot afford the tuition, which is about 3,000 to 4,000 RMB per semester in total. Therefore they are considering transferring the children to the cheaper schools in the neighborhood.

They do not have money for any entertainment. They do not have health insurance and other social welfare. They prefer going to big hospitals when they are sick, but they cannot afford the high healthcare cost there. So for most of the time they go to the local clinics.

They are not happy about their life. They are considering to move or to change their means of living, but they do not know where to go and what to do. They do not have any plans of the future for themselves and their children.

Tailor on the street

This is a couple in their 60s. They work as tailors on the street. They have two kids, a boy in collage and a girl running her own retail shop. The kids are not living with them. They can only afford the rental housing of the worst quality in the urban village, which costs 300 RMB per month for a unit about 20 square meters. Their income is only enough to cover the minimum living cost. They do not have spare money for entertainment or healthcare. But they are lucky that they are very healthy and seldom get sick. They do not have plans for their future. But they say they might go back to their hometown when they want to retire.

Fruit vendor on the street market

The man sells fruit at a street market on the edge of an urban village. He is from Hubei Province. He lives in the nearby urban village, sharing a two bedroom suite with a friend. The rent is 800 Yuan per month for the suite. The rent for the booth is about 2,000 RMB per month, he pays the rent to the urban village landlord, but he still needs to deal with the police, since the land is not officially authorized as market space.

Conclusion

The residents in the urban villages are not the owners. They are doing small businesses such as shops and fruit booth. Their life quality is not so good (except the first family we interviewed, they are pretty happy about their life), and most of them do not have a plan for their future.

Voice of the Chinese Developer

July 12, 2009

Phone interview

Xiaodong Wang

Manager at the land acquisition department of Vanke, Co Ltd

What is the common land acquisition process in Shenzhen?

In Shenzhen, there is not much new land to purchase in the market now. For Vanke, most of the land acquisition is to buy “second-hand” land from other developers.

The land acquisition of new land often comes from the urban renewal project. The government authorizes a developer to take charge of relocating the residents at the developer’s cost. Then the government will take over the land and auction it in the market. After the auction, the developer who did the relocation can get 90% of the land sale revenue, and the government will get 10%. The developer who funded the relocation usually gets the land because it has already contributed money when doing the relocation, therefore 90% of the land sale revenue will be returned to it.

The land acquisition for second-hand land is much more complicated than new land. According to the state law, the land itself is not tradable. Therefore in order to acquire the land, the buyer should join in the joint venture formed for the land and purchase the stocks of the joint venture. If there are more than one piece of land under a joint venture, there should be an auditing on the joint venture, and the target land should be taken to the related government agency to get priced. Then there should be a new joint venture set up for the target piece of land.

Who takes care of infrastructure development?

It depends. Sometimes the government takes care of the inftrastructure, but sometimes the developer will have to build the infrastructure on its own cost.

How much is the land cost comparing to the overall development cost?

The land cost is always the largest portion of the overall development cost. In Shenzhen, as of the central urban area (within the Special Economic Zone), the land cost per built square meter is usually up to more than 6,000 RMB, which is about 70% of the overall development cost.

What is your opinion and what is Vanke’s position in urban village redevelopment?

Urban village redevelopment is not of Vanke’s interest. Vanke has never done any of this type of project before. Because it is too complicated and too costly to get the land in an urban village. There are too many parties involved, therefore, as a large public company, it usually takes a very long time and a lot of money to do this type of projects. But there are some small private company doing urban village redevelopment, because they are out of public supervision, therefore they might be able to de some “underground” deal.

What do you think is the biggest hurdle for affordable housing in China?
It is the land cost. The central government is the ultimate reason for the skyrocketing land cost, because it sees the land sale as the primary revenue source.

What is your opinion of the urban village redevelopment plan done by the Planning Bureau of Shenzhen?
It is easy to redevelop those urban villages in favorable locations where the government has its interest in, such as the city center therefore the government will be very supportive. However, for those urban villages in less favorable sites, it is very hard to accomplish the redevelopment goal stated in the plan. There is definitely not enough money to do it.

Do you think it is possible for developers to collaborate with the urban village corporations? By collaboration it means the urban village corporation contributes the land into the joint venture formed for the redevelopment project.
Yes, it is possible. As I mentioned, land cost is the biggest portion of development cost. If the urban village can contribute the land, the biggest problem is solved.

Asian Community Development Corporation

March 12, 2009

Jannelle Chan, Project Manager

Chinatown, Boston, MA, U.S.A.

What is your motivation of developing affordable housing?

Different CDCs have different motivations. Our primary mission is to improve neighborhood revitalization. For us, the need for affordable housing in Chinatown is urgent. Also, we think that affordable housing is a generator for other public goods.

Why do you want do affordable housing, and why do you want to concentrate in affordable housing?

ACDC is dedicated to leverage the physical environment to revitalize the whole community, and sees affordable housing as a generator for other community benefits.

What is unique about ACDC?

The ACDC is based in Chinatown, which is one of the areas of highest density and poverty rate, but also a desirable place right next to downtown area. Real estate is a major part of ACDC's work, especially the mixed-income development. The high land and real estate price is an opportunity for ACDC to leverage more resources. For instance, the real estate development in Chinatown in popular on the market, which enables ACDC to sell market rate units at a good price, and therefore cross subsidize other affordable units.

What do you think about the partnership with government, other enterprises and organizations? What is the common partnership structure and ownership structure?

ACDC often partner with developers, rely on their experience in real estate development. Sometimes ACDC partners with investment funds. Our projects are often built on city or state owned land, which we buy from public sector or from private entities. Sometimes there is land subsidy, sometimes there isn't. The development process and the partnership structure can be very complicated.

For instance, in the ongoing Parcel 24 project, the land is owned by the government. We partner with an investment fund's real estate arm, who provides equity, and a developer, who provides developing services. The money comes from a variety of sources such as HOME funds, housing trust funds, and Low-Income Housing Tax Credit (LIHTC). The LIHTC is only for the affordable rental units. The LIHTC requires the property be affordable for at least 15 years. In this 15 years, the investors altogether own 99% of the property, while as the general partner, ACDC own 1% of the property. After 15 years, ACDC has the option to decide whether to buy other part of the ownership or not. The revenue generated by the property is used to cover debt payment and operational costs of both the property and ACDC. There is usually no surplus. For the property itself, there are different ownerships such as affordable condos, market rate condos, market rate rentals, affordable rentals, and retail space and parking space. Each of these types has its own separate ownership piece.

What is unique about mixed-income housing? In a mixed-income housing project, how do you decide the degree of "mix"? Why do people want to live in a mixed-income community, especially the rich people? How do you manage a mixed-income housing project?

Mixed-income housing is not just for social reasons. In ACDC's case, it is more for the financial reasons. For instance, in a downtown site, the high land value enables the cross subsidy. LIHTC is only for affordable rental units, affordable home ownership units has less subsidy. Therefore cross subsidy is of particular importance to affordable home ownership units. In every project done by ACDC, we need a higher density and a certain portion of market rate units to make it financially feasible.

For ACDC, the favorable location is a strong attraction for market rate consumers. Moreover, what matters is the quality of the product and services provided, not the project is mixed-income or not. ACDC hires property management firms to manage properties, which insures the professional quality. Also, people who choose mixed-income property are already aware of the feature of mixed-income development. So there shouldn't be much conflict.

Trinity Financial Inc

(For-profit urban developer)

March 16, 2009

Patrick Lee, Principal, Executive Vice President

Sarah Barnat, Project Manager

Boston, MA, U.S.A.

Motivation: why do you want do affordable housing projects?

Trinity is interested in meeting the needs that are not currently met, affordable housing is a field of great needs. As a for-profit entity, Trinity aims at seeking profit which at least cover the cost and generates some revenue, comparing to commercial real estate, affordable housing is of less risk and financially feasible.

What do you think is the biggest difference between the affordable and market-rate housing development?

Affordable housing is less risky than market rate housing development. Because it has governmental support, and it has a much bigger needs and less competition, therefore if you are willing to only obtain a limited profit, and contribute to the wellbeing of communities, affordable housing is a good business to do.

How do you find development opportunities? What is your criteria of choosing a project?

We find our development opportunities through the world of mouth. As a firm with a good reputation, Trinity usually attracts people to come to us.

Our project selection criteria: deals of certain size, at least 100 units. we are looking for deals that we can add value. Find deals match our certain strength. Deals have a reasonable path to the finish: able to get approved, get finished, marketed.

What is your average return on affordable housing projects?

In affordable housing projects, especially LIHTC projects, instead of owning, receiving revenues from the property and capitalizing it later, developers usually charge an upfront development fee which is a certain percentage of the total development cost. Trinity usually charges for about 5% to 10%. For instance, in the Maverick Landing project, 10% of the total development cost is set aside and split among Trinity and other partners. Trinity finally gets about 6% of the total development cost.

What do you think about the partnership with government, other companies and organizations? What is the most common partnership structure? What is the common ownership structure?
The partnership is an approach that makes a lot of sense. Building affordable housing in urban areas is very challenging, it requires a lot of skills and resources. The partnership with nonprofit, public agencies and other enterprises enables different skills to be utilized. We are always looking for partners that can complement our skill sets. We found that partnerships with local communities are usually very helpful.

Partnerships can be structured in many different ways. Usually, we are the general partner. We have a local partner who has expertise of relations in local community. Sometimes we also have a social service partner. Of course, we partner with housing authorities, rely on them to deal with federal government and programs.

Can you tell me something in detail about the LIHTC?
The LIHTC is a governmental subsidy program designed for affordable rental units. the federal government allocate tax credits to state housing authorities, state housing authorities then allocate tax credits to project sponsors who are building affordable rental units. The tax credits are then sold to the corporate investors who have the need to offset their tax liabilities. The sale revenue is the equity for the project. There is always a syndicator involved to coordinate between tax credit holder and investor. For instance, in the Maverick Landing case, we collaborated with a syndicator who syndicated the tax credits to Bank of America.

As mentioned before, in affordable housing projects, especially LIHTC projects, instead of owning, receiving revenues from the property and capitalizing it later, developers usually charge an upfront development fee which is a certain percentage of the total development cost. This is because LIHTC project has a very strict requirement on affordability. It usually requires the property be affordable for people earning incomes below 60% AMI for 15 years. The cash flow generated by the property are mostly used to cover the debt service and management costs. After 15 years, there is not much residual value of the property, because upon resale, the affordability requirement will apply to the new owner again. The new owner will be allocated new tax credits, and starts a new cycle of 15 years.

What is the staff structure in Trinity?
We have staff in real estate finance, project management and asset management. The finance department takes charge in the project underwriting and acquisition. The project management department oversees the design and construction process. The asset management department oversees the property management firms we hire to conduct the day to day operation tasks.

Why do people want to live in a mixed-income community, especially the rich people? How do you manage a mixed-income housing project?

By living in mixed-income community with people of different income and background, you can get a feeling of living in an urban community. For the better off people, they are attracted by the quality of property and the service. For the low-income people, they are attracted by the not only by the quality, but also by the affordability and the opportunities brought by the mixed-income feature. It is believed that living in a mixed-income community encourages low-income people to do better.

The key to managing mixed-income is to make sure everyone is treated equally. Also, social services, especially for those low-income people, such as job training and youth programs are of great importance in mixed-income projects.

In a mixed-income housing project, how do you decide the degree of "mix"?

The process is a mix of different criteria systems. Firstly, the unit mix should make the project finally feasible. Secondly, the lenders have their criteria of unit mix, we need to satisfy it in order to get debt financing. Thirdly, the housing authority requires a certain percentage of the original residents are able to come back after the redevelopment, and, ideally, anyone who wants to come back will be able to do so.

What are the special difficulties for affordable housing development in this recession?

The biggest difficulty is the tight credit market, which makes it very hard to raise debt today. Also, the sharp decrease in profit makes the corporate investors have less need for tax credit to offset their tax liabilities, therefore the LIHTC investment shrinks dramatically.

What do you think about the role of green development?

Green is very important for our future. Trinity is dedicated in promoting green buildings. The biggest challenge is that it is very costly at the beginning. So we'll need governmental subsidy to carry it out. We are doing it not because it is financially feasible, but because it is beneficial for the future. And this process is necessary. It is always costly at the beginning, but if you get started and keep on trying, it will finally become financially feasible.

What it takes to become a successful real estate professional?

First of all, you need to have a good understanding finance. In real estate, lots of work is done to raise capital. Secondly, you should be able to work with people and be persistent. As a re developer, you persuade people from government, community, and other enterprises to collaborate with you to make the deal happen.

The Community Builders Inc

(Nonprofit urban affordable housing developer)

July 30, 2009
Willie Jones, Senior Vice President—Regions
Boston, MA, U.S.A.

What do you think is unique about The Community Builders (TCB)?
First, TCB is a multi-state and multi-regional organization. Second is about the scale of activities, we do not do deals less than 10 million dollars. Third, TCB is a mission-driven organization. Besides making money, TCB has public purpose. Further the quality of lives of low- to moderate-income people.

What do you think is the biggest differences between nonprofit developers and for-profit developers? What are the advantages and disadvantages comparing to them? Do you have more access to public resources?
The biggest differences are scale and the target. TCB has its own management and service delivery system. TCB has access to philanthropic money and intermediaries who have public funds (for instance, Mass Housing Partnership), they are only for nonprofit organizations. The disadvantages is, for-profit developers usually have better access to private funds, because without the restrictions of nonprofits, they are more attractive to for-profit organizations.

How do you find out development opportunities?
TCB has connections in the cities we have worked. There are three major ways to get information about development opportunities. First is the government will ask TCB to do the new projects. Second is to compete through request for proposals. Third, TCB works to create new relationships.

How do you collaborate with the cities?
For instance, in the HOPE VI application, TCB will select qualified housing authorities to collaborate with. The housing authorities look for experienced partners like TCB. TCB will help draft the application draft. Also, once TCB sees a city's interest within our capability, TCB will contact the city to make suggestions to them.

How do you deal with financing? Do you put the deal together by yourself?
Through practice, TCB has accumulated sufficient experience in putting together innovative mixed-finance deals. TCB does syndication for itself, also for other nonprofit organizations. But TCB is doing less and less for others, because there are many experts in syndication and intermediary.

What are the major funding sources? Do you use your own capital?

TCB does not have much capital to put in developments. Our own funds are mostly used to cover predevelopment costs such as design. As a nonprofit organization, TCB heavily rely on public resources. Low Income Housing Tax Credit (LIHTC) often accounts for about 40% of the total development costs (TDCs); debt, including both market rate and subsidized debt, accounts for about 20% of the TDCs; soft money from different levels of governments, such as HOME funds, block grants and multiple programs accounts for about 20%.

What is the usual profit?

As a nonprofit organization, by using the public resources, TCB has cap on profits. The development fee TCB charges usually ranges between 10% and 12%, but this is usually to be split among partners. Also, as a nonprofit, with the public mission, TCB cannot be as selective as the for-profit developers. This means TCB does lots of projects that are not so financially feasible, but have positive social impacts on the communities. Therefore, the profits made by some projects will be used to cover the deficit of other projects. As a large organization, TCB also has a higher operational expense. Therefore TCB’s revenue is just alright to cover the costs. TCB is not making a lot of money, making money is not TCB’s mission.

What do you think is the trends of the affordable housing development in the United States in future?

The affordable housing development will become more urban, which means more concentrated and denser development. Gone through two generations of suburbanization, the U.S. cities are shrinking, thus to become more economically efficient. There will be further segregations of low-income and the better off people. Due to the limitation of resources, there will be gentrification issues in the cities. Lastly, the sustainable practice will be of great attention for both policy makers and practitioners.

What do you see as the future of nonprofits organizations in affordable housing development?

Nonprofit sector was affected dramatically in this recession, some are already wiped out. In the future, there will be emergence of a new generation of urban housing developers, many of whom are for-profit entities with sufficient expertise and resources of private funds. This will be a big challenge for the nonprofit sector. In one or two years, there will be a dramatic reconstruction of the nonprofit sector, which will wipe out the weak ones and keep the strong ones. This will lead to a more competitive and thus more efficient affordable housing delivery system.

Mass Housing Partnership

(Quasi-governmental organization)

July 22, 2009
Nancy McCafferty
Senior Loan Officer, Massachusetts Housing Partnership
Boston, MA,U.S.A.

What is unique about the MHP?

The MHP was founded as a private nonprofit organization, but was later changed into a quasi-governmental organization. MHP specialized in affordable housing financing, which is to issue subsidized loans to developers and home buyers, and to provide funding and technical assistance for affordable housing related programs. The funding source of MHP comes from the "interstate banking act", which is unique in the state of Massachusetts.

Can you tell me something about the "Interstate Banking Act"?

This is unique in MA. The state government of Massachusetts requires that every time when a bank outside Massachusetts wants to do acquire a bank in the state, it has to contribute 0.9% of the total assets of the bank it is acquiring to the Massachusetts Housing Partnership as to fund issuing loans for affordable housing development.

What is the source of the money in your loan pool? How does the money work at MHP?

Under the interstate banking act, the money for the loan pool comes from the banks who are doing merge and acquisition deals in Massachusetts. The interest rate of the loans is fixed, and is determined as follows:

- The CDA rate determined by the Federal Home Loan Bank (FHLB)[2],
- Plus a premium of 25 bps set aside by the MHP for their profit,
- Plus a premium of 130 bps for the bank.

Therefore the interest rate is 155 bps over the primary rate from the FHLB, which usually ranges from 7 to 9 percent.

How do you collaborate with HUD, state and local housing authorities, CDCs, developers, and other organizations?

[2] This rate is different from day to day. The rate is published at FHLB website.

As a quasi-governmental organization, MHP collaborate with state government to make programs. MHP issues loans to developers to finance the projects. The projects can be mixed-income, MHP will fund all of the project as long as the project meets the following criteria (which criteria to apply depends on different programs):

- At least 25% units are affordable to people earning less than 80% AMI, or
- At least 20% units are affordable to people earning less than 50% AMI, or
- At least 40% units are affordable to people earning less than 60% AMI, or
- At least 50% units are affordable to people earning less than 80% AMI.

MHP also provides grants and technical support for housing authorities and CDCs.

Can you talk about the impact of recession on affordable housing development?
Now for the recession, many investors are not making many profits, therefore they do not have the needs to offset the tax liabilities. So the investment in tax credits shrunk greatly. For instance, the Freddie Mac and Fannie Mae, who used to be the biggest tax credit investor (about 80% of the investment), are not investing in tax credits anymore, due to the huge loss of loans they issued. As part of the American Recovery and Reinvestment Action (ARRA), the federal government's solution to this problem is to put in more money as grants to help the state government to buy the tax credits in order to put in equity in affordable housing projects, which are called TCAP and TCEP.

As the commercial real estate market is hit greatly by the recession, many commercial developers are turning to affordable housing for the help from the government and other organizations in the forms of subsidized financing, and the large demand and less risky feature of affordable housing.

What do you think is the best part of the partnership in the United States? What do you think should be improved?
Having many financing sources together on a project provides for a diversified risk structure so that if the borrower has trouble there is not one entity that will take the hit for an entire loss. Also, it allows for many eyes focused on a project to keep the borrower on their toes and if troubles do occur you'll have a team of folks to potentially help to work-out the problem.

The investor market at the moment is in real trouble as there is such a huge supply of tax credits and not enough interest on the part of the private sector to purchase/invest. I think that hopefully this will turn around over the next couple quarters but if not we may have a real issue bringing affordable housing to the cities and towns that are in dire need to house homeless and low income folks.

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