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Housing Migrant Workers in Rapidly Urbanizing Regions: A Study of the Chinese Model in Shenzhen

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ABSTRACT China has experienced a huge wave of rural to urban migration over the last 25 years; however, Chinese cities do not have the large-scale slum settlements found in other developing countries. Has China found a new way to solve the housing problems of migrants and the urban poor? This paper addresses this question and reports the findings of a recent research project carried out in Shenzhen City. In general, Chinese migrants are poor in comparison with official urban residents. The majority of them live in shared rooms or small apartments in the so-called urban villages. Housing poverty, especially overcrowding, is a serious problem. This paper also highlights the positive contributions made by urban villages and private landlords in housing the large number of migrants in cities.

KEY WORDS: Housing need, housing the poor, Chinese urbanization, migration, private rented housing, housing condition

Introduction

Housing for rural migrants and the urban poor is a policy challenge for all governments in developing countries. During the last half a century, various policies have been promoted and implemented by international organizations and national governments around the world. Housing for migrants and the urban poor is still an unsolved problem. Large areas of slum settlements can be found in many African, Latin American and Asian cities. According to the United Nation's Millennium Development Goals Report 2007, in 2005, throughout the world, one in three urban dwellers lived in slum conditions (UN, 2007, pp. 26-27).

China is experiencing a period of fast urbanization. It is estimated that approximately 225.4 million migrant workers live in cities and towns (140.4 million are long-term

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migrant workers living outside their own county and 85 million have migrated within their own county) (Sheng, 2009). Although the government has made very little effort to provide housing for this population, Chinese cities do not show the large-scale slum settlements found in other developing countries. How has China handled the migrant housing problems during the period of extraordinarily rapid development and urbanization? Where and how do poor migrants live in Chinese cities, and under what kind of conditions? This paper provides some answers to these questions through a case study of Shenzhen city.

Shenzhen has developed from a small border town into a large city of approximately 8 million residents over a short period of 30 years (*Shenzhen Statistical Yearbook*, 2008). The vast majority of its population are migrants. However, Shenzhen's migrant population does not only consist of poor migrants from rural areas; the city is also home to a large number of professionals, investors and managers from other cities. These affluent middle-class professional migrants have become part of the mainstream population in the city. They live in new housing estates separated from the poor (Huang, 2003; Li & Li, 2006; Li & Yi, 2007). The main focus of this paper is the housing conditions of low-income migrants, including most rural migrants and poor urban to urban migrants.

Low-income migrants tend to live in particular locations such as urban villages, construction sites or industrial factory dormitories. Urban villages (*cheng zhong cun*) were originally rural settlements located in suburban areas. Due to urban expansion the agricultural land owned by these villages was gradually developed, and these traditional villages became incorporated into the built-up area. Due to their unique locations and the collective ownership of land (non-state ownership), cheaper private rental housing in those villages become the main source of accommodation for poor migrants. The research here focuses on these urban villages where the majority of the low-income migrants live. In 2005 there were 241 urban villages in Shenzhen; 91 located inside the Special Economic Zone (SEZ) and 150 in outside areas (Liu, 2007).

The empirical part of this paper is based on fieldwork conducted in the city between 2005 and 2007. Qualitative interviews with local officials and documentation analysis were supported by a survey of migrant housing conditions. For the survey, a target sample of 800 migrant households was drawn systematically in several stages. The first stage involves the selection of villages with a large number of migrants to cover all geographical areas: four villages from the central area, eight from other inner urban areas inside the Special Economic Zone, and another four from areas outside the Special Economic Zone. Within each of the selected villages, the study examined the social and economic profiles of residents and mapped the living patterns before selecting individual households for interview. Typical or main streets in each village were selected first, and residential buildings along these streets were sampled at equal intervals. The majority of these buildings are high-rise with many floors. Within each building only one household on each floor was selected for interview. This sampling method, not entirely random, ensured that the sample was as systematically drawn as possible to give a good representation of the migrant population living in urban villages. Face-to-face interviews with either the head of household or the partner (using a questionnaire) were conducted inside the homes of migrants (the final valid sample size was 807).

Housing the Poor in Developing Countries

For a long time, researchers and policy makers around the world have been searching for answers to the question of how the urban poor should be housed in developing countries. During the immediate post-war period, many newly independent states followed the practice of industrialized countries. As part of a general strategy of stabilization of labour and the creation of skilled working and middle classes, subsidized public housing estates were built on cheap suburban land (Jenkins *et al.*, 2007; Renaud, 1981; Wakely, 1988). In some Latin American countries, government aided self-build housing was tried as an alternative means to this public dominated conventional construction (Burgess, 1992). The capacity of the state to supply low-cost housing in urban areas through public housing and self-build methods proved limited in the 1950s and 1960s. They produced a minimal number of housing units in relation to rapidly growing need, and exacerbated the housing situation through the continued eradication of slums and squatter settlements. In addition, both forms of housing were too expensive for the vast majority of the population, but in fact tended to benefit the growing number of middle classes (Jenkins *et al.*, 2007).

In the late 1960s a different approach to non-conventional housing supply began to develop, termed 'self-help' housing, which was promoted mainly by John Turner and his colleagues (Harris & Giles, 2003). Turner argued that squatter areas were not a form of social malaise, but triumphs of 'self-help' effort. Turner's proposals promoted individual homeownership and self-help involvement in progressive housing provision over time. He argued for a reduction in the government's role to ensure security of tenure for land and housing, applying lower official standards, and providing access to financial and appropriate technological support. Turner stated that housing users know their needs better than government officials, and high regulatory standards undermine rather than guarantee more adequate housing. Housing users can access and utilize resources in more effective ways than conventional housing solutions and mass production permit, albeit with wider variation in quality, and this is reflected in lower costs and better affordability. Self-help housing also produces better architectural solutions as it focuses on individualized household use values and not abstract market exchange values (Turner, 1986, 1988; Jenkins et al., 2007). This self-help housing approach was adopted and promoted by the United Nations and the World Bank in the 1970s, together with a shift in development strategies from modernization to the idea of 'basic needs' and 'redistribution with growth'. The World Bank supported a range of self-help housing projects (including, site and services, slum area upgrading and employment creations) from the 1970s to the 1990s (Burgess, 1992; Pugh, 1995, 1997). Despite the support of the World Bank and other international agencies on self-help housing policies and projects, the results were limited within these projects themselves and far short of actual housing demand in most urban areas.

In line with the emergence of the neo-liberal development strategies, a different policy approach to housing emerged in the 1980s. Housing policies became closely related to macro-economic policies and structural adjustment (Burgess, 1992; Pugh, 1995). State intervention was characterized by a transition from housing supply to support policies and had the objective of reforming whole housing systems, thus increasing overall housing supply, but not focusing on lower-income groups and the poor (Wakely, 1988). This 'support approach' complemented the growing interest in urban management problems, and neo-liberal tendencies to privatization. It was taken up by the United Nations

and the World Bank through the 'enabling policies', which facilitate and encourage private and community sectors to respond to housing demand, and limit state intervention to the provision of legislative, institutional and financial frameworks. The World Bank's enabling housing policies focused on several macro-economic instruments, with a view of society composed of individuals and individual households that should be given access to property rights, mortgage finance, etc. (Payne, 2002; World Bank, 1991, 1993). The main thrust of these policies was the growth and development of the whole housing sector in urban and national contexts, and poverty alleviation was to take place through the 'trickle-down' effect and be supplemented with 'safety nets' for the most vulnerable (Pugh, 1997; Rakodi & Lloyd-Jones, 2002).

The more recent initiatives toward housing the poor include The Habitat Agenda and The Millennium Development Goals. The goals of the Habitat Agenda were adequate shelter for all and the development of sustainable human settlements in the urbanizing world. Governments were expected to formulate housing policies that were integrated with overall macro-economic, environmental and social policies, through frameworks that enabled markets to work, as well as facilitating the community-based production of housing (Jenkins *et al.*, 2007).

The Millennium Development Goals call for a 'significant improvement in the lives of at least 100 million slum dwellers by the year 2020'. Slums were defined as places without access to adequate drinking water, sanitation, quality of housing and security of tenure, and were seen as being the product of two main processes: rapid urbanization and the urbanization of poverty. While focusing on ways to improve life within slums, the report recognized that such areas also provide important forms of affordable shelter, especially for the growing proportion of urban informal sector workers. They also were seen as being the basis for positive social and cultural movements. The report stressed that efforts to resolve living conditions in such areas had declined since the 1980s when they were a major development focus, and that slum upgrading or eradication programmes had failed to address underlying causes of the existence of these areas, mainly poverty. This report emphasized the global trends in urbanization, inequality and urban poverty and the role of links between local and national governments in addressing urban shelter problems (Jenkins *et al.*, 2007; UN-Habitat, 2003a).

Migration, Housing and Urban Villages

The Chinese residence registration (*hukou*) system divides the population into the rural population and the urban population. Any changes from rural to urban population have to be approved by the authorities (Chan, 1996; Goodkind & West, 2002; Ma & Xiang, 1998; Wang, 2004). From the late 1950s to the early 1980s the urban population increased very slowly due to the strict *hukou* restriction. The Chinese Government began to relax the control during the 1980s; rural migrants were allowed to stay in large cities as temporary residents (Shen, 1995). Rural to urban migration has since become a very important part of urban development (Davin, 1999; Fan, 2001; Knight & Song, 1999; Solinger, 1999). The expansion of Shenzhen city during the last 30 years has been a result of migration. Official residents in the city increased from less than half a million in 1985 to approximately 2.12 million in 2007 (including government approved migration), temporary residents/migrants increased from a similar level to over 6.5 million (*Shenzhen Statistical Yearbook*, 2008). Three-quarters of the residents in the city were temporary resident card holders.

Rural migrants and poor urban to urban migrants are often concentrated in special areas in cities (Zhu, 2007). Construction and industrial workers of large factories tend to live in dormitories, usually provided by their employers. Migrants not employed by large organizations have to find their own accommodation. They live mainly in private rental housing in poor areas of cities (Lu & Song, 2006; Mobrand, 2006). The location and condition of these areas varies from city to city (Wang, 2004). In Shenzhen low-cost housing is mainly found in urban villages. When the Special Economic Zone was set up at the beginning of the 1980s, the new city centre, major public buildings and road networks were planned and built on fresh agricultural land between traditional villages. Village residential areas and farmers' houses were left behind by the development. The loss of cropland was accompanied by the loss of agricultural income. Village residents needed to find other ways of earning a living and thus turned their attention to land and property related businesses.

During the 1980s, when the number of migrants increased in the city, some villagers rented out their spare rooms in order to have a supplementary income. Traditional village houses were of poor quality. The demand for cheap housing from the in-coming migrants provided them with an excellent opportunity to rebuild. Rental income plus the compensation for the loss of agricultural land from the government and developers were then invested to extend the house. Additional rooms were added on to original buildings or on top of the older buildings. Some richer families rebuilt their houses, turning them into multi-storey buildings (Wang *et al.*, 2009).

New houses in urban villages are built with steel and concrete frames. Each household has tried to maximize the building areas on the land available. The only option is to build upward and increase the number of floors. In the late 1980s and early 1990s, most buildings had fewer than five storeys. From the late 1990s, 80 per cent of new buildings were between six and nine storeys, 5 per cent were over 10 storeys, and some have reached 20 storeys (*Shenzhen Real Estate Yearbook*, 2005; Wang *et al.*, 2009). Inside each building the units available for rent also vary. Some are one-bedroom units for singles, while others comprise up to three bedrooms. In each village there are also differences between older traditional areas and recently built new areas. Older areas typically predate to the 1980s. Houses there are low rise, poorly designed and of lower quality. Modern multi-storey buildings dominate new parts of villages. Very poor migrants tend to rent in the old parts of villages and better off migrants stay in the new parts of villages (Wang *et al.*, 2009).

Characteristics of Migrants

Migrants tend to be young and healthy working age adults. The average age of the migrant head of household in the sample is 30.7 years. The length of their stay in the city ranged from less than a month to 30 years. The average length is six years for heads of households and seven years for their partners. Most single migrants arrived in the city in their early 20s (20–21) and most married migrants and their partners arrived at the city in their middle 20s (26–27). Approximately 66 per cent of migrants in the sample are from rural areas. Of the 807 cases, 47 per cent are individuals who live on their own (including those sharing with other individuals) and 53 per cent are families. Over 63 per cent of migrants living in urban villages are married, and of these married heads of households, 84 per cent live in Shenzhen with their partner. The majority of the married migrants have a child/children, and of these, 62 per cent have brought their

Table 1. Characteristics of migrants

	Orig	ins of resid	ence regist	ration	T	otal
	Ur	ban	Rı	ıral		
	No.	%	No.	%	No.	%
Total	271	33.6	536	66.4	807	100.0
Household type						
Single person household	153	56.5	223	46.6	376	46.6
Families	118	43.5	313	58.4	431	53.4
Gender of head of household						
Male	189	69.7	374	69.8	563	69.8
Female	82	30.3	162	30.2	244	30.2
Marital status of head of househo	ld					
Single	122	45.0	176	32.8	298	36.9
Married/divorced/other	149	55.0	360	67.2	509	63.1
Number of children of married co	uple or div	orcee				
No children	35	25.0	23	6.5	58	11.7
1	66	47.1	139	39.3	205	41.5
2	29	20.7	133	37.6	162	32.8
3	8	5.7	46	13.0	54	10.9
4	2	1.4	9	2.5	11	2.2
5	0	0.0	4	1.1	4	.8
Final education level of the head	of househo	ld				
Not finished primary school	5	1.8	14	2.6	19	2.4
Primary school	12	4.4	62	11.6	74	9.2
Junior middle school	44	16.2	280	52.2	324	40.1
High School	67	24.7	117	21.8	184	22.8
Career/technical certificate	38	14.0	33	6.2	71	8.8
College diploma	50	18.5	21	3.9	71	8.8
University degree	48	17.7	8	1.5	56	6.9
Postgraduate degree	7	2.6	1	0.2	8	1.0

child/children to the city. The educational background of migrants is generally low in comparison with official urban residents, and rural migrants tend to have a particularly poor educational background (Table 1).

Housing Conditions

Sources of Housing

Most migrants in urban villages live in either private rental (83.6 per cent) or employer provided (13.3 per cent) housing and very few own a property (Table 2). In relation to family types, one-person households have higher proportion of housing provided by employers (23.7 per cent), as opposed to 4.2 per cent among two or more person households. A comparison with an earlier study of Shenyang and Chongqing is very interesting (Wang, 2003, 2004). In all three cities, over 80 per cent of migrants rented their housing, although the surveys were carried out at different times.

	Shenzhen		Shenyang	Chongqing
Housing tenure	No. respondents	%	%	%
Owners	11	1.4	8.7	1.2
Provided by employers	107	13.3	5.0	5.7
Rented from the market	675	83.6	82.6	81.7
Borrowed from friend/relative	14	1.7	1.9	2.5
Total	807	100.0	100.0	100.0

Table 2. Housing tenure (%)

Notes: Shenyang and Chongqing surveys were conducted in 2000 (Wang, 2003, 2004); Shenzhen survey in 2005/06.

Space

Nearly 60 per cent of migrants interviewed live in self-contained units, although the space available varies substantially. Migrants from urban areas tend to have more space than migrants from rural areas. There is also a clear difference in the average floor space per person between male and female-headed households, with female-headed households having more living space. A possible reason for this could be that the average household size of the female-headed household is smaller than the male-headed household (1.72 persons against 2.61 persons). The most common size for flats in urban villages is approximately $40-45 \text{ m}^2$ (Tables 3, 4 and 5).

Sharing a room or a flat with other migrants is also very common. Approximately 40 per cent of respondents share either a room or a small flat with other people. Those who share rooms with other families or individuals have the lowest living standards. On average, four people share a room, with an average floor space of only 7.7 m² per person. In some instances more than 20 people share a room, and some individuals have only 2-3 m² of living space (just enough for a single bed). Although the majority of those who share a room are one-person households, there are 25 (5.8 per cent) families in the sample with two or more persons sharing one room with other people. If a room is shared by two married couples, wooden boards, cardboard or curtains are used to keep some privacy. Most halls in flats tend to be used as another bedroom for either children or other tenants.

Facilities

Facilities inside migrant housing are generally poor in comparison with the general standard in the city: 37 per cent of migrants do not have exclusive use of a toilet, bathroom or kitchen; 35 per cent do not have exclusive use of a water tap; over 40 per cent do not have showers. Moreover, even though a gas supply has become the norm in Shenzhen, many migrants still use coal as their main source of fuel (Table 6). Some migrants put coal-fired stoves or gas cookers inside their bedrooms, which could be a fire hazard and an uncomfortable source of heat in the very hot summer.

Most rooms and flats rented to migrants are unfurnished, and tenants are expected to bring their own furniture. For this reason the standard of furniture varies between families, and household furniture reflects the nature of the residents' work. In an extreme case, two married couples shared a room of approximately 9 m². Apart from beds, an old radio, two

Table 3. Housing condition: sharing

	ple	Floor space per person (m ²)	7.7	13.0	42.6	23.7	25.6	
	Whole sample	% Flc	23.2	16.2	9.0	59.4	9.0	100.0
		No. of households	187	131	5	479	5	807
rson		%	5.8	17.2	0.7	75.9	0.5	100.0
Two or more person	households	No. of households	25	74	3	327	2	431
	splot	%	43.1	15.2	0.5	40.4	8.0	100.0
	One person households	No. of Households	162	57	2	152	3	376
			Sharing a room with others	Family use 1 room	Family use 2 rooms	Family use 1 whole unit	Other	Total

Table 4. Housing floor space

		Average housing floor space		Average housing floor space	
	No. of respondents	of the unit	Standard deviation	per person	Standard deviation
From urban areas	181	43.4	21.3	26.7	18.8
From rural areas	298	45.2	24.8	21.9	16.2
Male	355	45.8	23.1	22.1	16.8
Female	124	40.8	24.3	28.5	18.1
)	Average housing floor space		Average no. of persons	
	No. of respondents	per person	Standard deviation	in room	Standard deviation
From urban areas	46	9.5	6.1	3.0	2.3
From rural areas	131	7.0	5.4	4.3	3.2
Male	114	7.4	5.9	4.3	3.5
Female	63	8.1	5.3	3.4	1.9
Overall		7.7	5.7	4.0	3.1

Table 5. Sharing a room: number of persons in room and floor space per person

Number of persons sharing a room	No. of respondents	%
2 people	77	42.5
3 people	32	17.7
4 people	28	15.5
5 to 10 people	36	19.9
10 to 20 people	8	4.4
Total	181	100.0
Housing floor space per person		
Less than 2 m ²	13	7.3
$2.1-4 \text{ m}^2$	37	20.9
$4.1-6 \text{ m}^2$	49	27.7
$6.1-8 \text{ m}^2$	20	11.3
$8.1-10 \text{ m}^2$	27	15.3
$10.1-15 \text{ m}^2$	18	10.2
Over 15 m ²	13	7.3
Total	177	100.0

hand-washing basins, a couple of stools and two sets of gas cookers, there were no other furnishings. Household furniture also provides a good indication of how long the tenants have been in the city and their long-term plans. Those who have stayed in the city for several years and plan to stay on have accumulated some furniture. Some migrants also use their rental home as a place of production. For example, shop owners' houses look like shops or storerooms; small restaurant owners' houses resemble a kitchen store; and waste collectors' rooms are filled with old newspapers and flattened cardboard (Wang & Wang, 2009).

Income, Rent and Affordability

Most migrants, particularly the heads of households, were in employment. The unemployment rate is 6.7 per cent, including new arrivals searching for jobs. The largest

Table 6. Facilities in house (% within group)

Exclusive use of:	Overall	From urban areas	From rural areas	One-person households	Families
Kitchen	61.8	71.2	57.1	48.1	73.8
Toilet, bathroom	62.8	72.7	57.8	48.9	74.9
Shower	57.4	64.6	53.7	43.9	69.1
Bath	8.1	7.0	8.6	5.1	10.7
Water tap	64.7	72.7	60.6	50.0	77.5
Refrigerator	33.1	41.7	28.7	20.1	43.6
Washing machine	23.0	31.0	19.0	16.2	29.0
Telephone	26.3	27.7	25.6	17.3	34.1
Piped gas supply	3.0	7.4	0.7	3.5	2.6
Bottled gas	63.3	64.6	62.7	45.2	79.1
Air conditioning	24.1	29.5	21.3	14.6	32.3
Computer	22.8	38.4	15.0	23.1	22.6
Internet	17.3	30.3	10.8	17.3	17.4

Table 7. Monthly income among migrants

	No. of respondents	Median monthly income	Mean monthly income	Standard deviation		
All head of households	745	2000	2749	3630		
From urban areas	248	2900	3780	4959		
From rural areas	497	1500	2235	2591		
Male	537	2000	3081	4127		
Female	208	1500	1891	1489		
Living alone	348	1900	2320	1861		
Living with family	397	2000	3125	4627		
All partners	222	1500	2082	2318		
From urban areas	59	2000	3181	2948		
From rural areas	163	1200	1684	1903		
Male	65	1500	2926	3147		
Female	157	1200	1733	1770		
(b) Income distribution						
	Incom	Income per capita	Head of households	seholds	Partner	
	No. of households	%	No. of respondents	%	No. of respondents	%
<500	77	10.0	19	2.6	13	5.8
501-1000	205	26.7	165	22.1	77	34.6
1001-1500	133	17.3	124	16.6	51	23.0
1501 - 2000	122	15.8	153	20.6	29	13.0
2001-2500	45	5.9	40	5.3	7	3.2
2501-3000	55	7.1	77	10.4	15	6.7
3001-4000	42	5.5	49	9.9	8	3.6
4001-5000	48	6.2	57	7.6	6	4.1
5001-10000	33	4.3	51	6.9	10	4.6
>10000	6	1.2	10	1.3	3	1.4
Total	692	100.0	745	1000	222	100

employment category among heads of households is working in a private company (35.4 per cent), followed by self-employed (29.5 per cent), and working for other family businesses (8.2 per cent). In terms of economic sectors, the largest proportion of migrants is employed in retail, hotel, catering and other services (50.8 per cent). The second most common category is manufacturing (19.3 per cent) and construction (9.2 per cent) (these two categories are under-represented as the sample did not include those living in factory-owned dormitories and construction sites). The proportion of people employed by highly paid public and finance sectors is very small. Of the heads of households, approximately a quarter of them are either managers of private companies or owners of small businesses, the rest are ordinary workers or office staff.

With the relatively poor employment profile, income among migrants is low in comparison with the city average. In 2004 the Municipal Government found that the average monthly income among migrants was only 1149 yuan, far below the average personal income in the city (2195 yuan) (Shenzhen Municipal Government Housing System Reform Office *et al.*, 2004). Table 7 shows that the median monthly wage income among these surveyed was 2000 yuan and 1500 yuan for heads of households and their partners respectively. The mean income is higher than the median income in every group and the standard deviation is large. Approximately 62 per cent of heads of households earn less than 2000 yuan per month; among the partners, 64 per cent of them earn less than 1500 yuan per month.

Rent paid by migrants for their housing in urban villages also varies. On average, migrants pay 534 yuan rent per month. Those living on their own or sharing with others pay less (Table 8). Although the rent was not extraordinarily high for a very prosperous city, rent does take up a significant portion of migrant workers' income. On average, migrants spend 24 per cent of their total household income on rent, and approximately a quarter of them spend more than 30 per cent.

Income and rent levels are the main factors that influence migrants' housing choice. The average cost of commercial housing in Shenzhen was approximately 10 000 yuan per square metre in 2006 and this increased to 13 000 yuan in 2008 (Shenzhen Municipal Bureau for Land Resources and Property Management, 2005 and 2008). In good locations, it is over 30 000 yuan. With most migrants earning less than 2000 yuan per month, it is not

	No. of respondents	Average monthly rent
Whole group	805	534
One-person households	375	422
Male	217	403
Female	158	448
From urban areas	153	512
From rural areas	222	360
Sharing a unit with others	182	342
Sharing a room with others	130	203
Multi-person households	430	632
Headed by a male	344	640
Headed by female	86	600
Family head from urban areas	118	741
Family head from rural areas	312	590

Table 8. Average monthly rent paid by migrants

surprising that the cheap and small houses found in urban villages are the most popular choice. Housing affordability is also affected by other factors such as the cost of food. On average, migrants spend 26 per cent of their income on food. The combined cost of rent and food represented half of the total household income for over 40 per cent of migrants in the sample. Unsurprisingly, nearly 68 per cent of migrants surveyed thought their current house in urban villages was the most suitable choice for them.

Housing and Poverty

Rural to urban migrants are often associated with urban poverty in rapidly urbanizing countries (Wu, 2005). For example, in Shenyang and Chongqing most of the rural migrants only managed to stay just above the official poverty line in 2000 (Wang, 2004). The current study in Shenzhen also began with this assumption. However, as demonstrated in this paper, the results are more complicated. First, the migrant population in the city consists of both rural to urban and urban to urban migrants; it also consists of both poorly educated manual labours and highly trained professionals. Even in the focused study of the relatively poor migrants living in the urban villages, it was only possible to establish a relationship between relative poverty with them, e.g. migrants' living conditions in urban villages or work sites are much poorer than those enjoyed by official urban residents in the city. However, not many migrants in the city live below absolute poverty (US\$1 a day). Migrants do have a relatively low income compared with other residents in the city. They often share rooms with others and live in conditions that lack essential facilities and amenities. However, this poverty is different from the desperate situations normally faced by the unemployed, the homeless or the poor migrants found in many developing countries' shanty towns and slums. Migrants in Shenzhen tend to have relatively stable jobs and income, although the income level is low. They can manage to stay in the city and some can also save a small amount each month to support their family members left in their original homes.

Evaluated against the decent housing criteria adopted by the UN in the Millennium Gaols (adequate sanitation, improved water supply, durable housing or adequate living space), most houses used by migrants in Shenzhen may not fall into the slum category. Houses rented by migrants are durable buildings with some sort of water supply. The sanitation may not be up to modern standards, but some basic facilities were provided. In this sense, Shenzhen and other Chinese coastal cities have been successful in handling migrant housing issues during the extraordinary speed of urbanization during the last two decades; they have largely avoided the creation of urban slums.

However, this does not mean that the life of migrants in Chinese cities and in Shenzhen is easy and problem free. Housing overcrowding is a serious problem. For working age persons in full-time employment (often working overtime) it would be expected that they could afford at least a room. Indeed, many of them share with others. To explore the overcrowding and housing poverty problem further, the sample were separated into two groups:

- (1) Single migrants who share a room with others and families that use only one room:
- (2) Single migrants who live in a room on their own and families that use two or more rooms.

Table 9. Logistic regression analysis of housing poverty with selected household characteristics

Predictor variables	Regression coefficients for the predictors
Number of persons in household	-0.439**
Age of head of household	0.000
Head of household is male	-0.014
Education achievement (from low to high)	-0.006
Number of years of being in the city (HoH)	-0.005
Head of household has a urban hukou	-0.344**
Income per person	0.000
Total monthly housing costs	-0.003
Number of people requiring support at original home	0.100**
Owning a house at original home	0.360
House tenure	
Private rental	0.368
Employer provide	0.857
Future plan	
Staying in the city	-0.228
Moving to other cities	0.259
Constant	0.787
Model chi square ($df = 14$)	198.133**
Number of cases included	660 (81.8%)

The first group (32.8 per cent of the sample) are referred to as those living in overcrowded conditions and in housing poverty. This consists of 162 singles sharing a room with others, 25 families sharing a room with others, and 74 families living in only one room. This definition seems generous in comparison with the UN standard (three or more person in a room). However, rooms in urban villages are very small; even for two people sharing, the floor space available for each person is below the national housing standard, and if they were official urban residents they would qualify for housing assistance. A logistic regression analysis of housing poverty was carried out with selected household characteristics (predictor variables) (Table 9). Individuals and families in housing poverty, as defined above, were given a value of 1 and the rest of the sample had a value of 0.

Although only a few predictors show a high level of significance, the test does reveal some very interesting points. Housing poverty among migrants is not closely associated with the common personal and household characteristics. Age, sex, educational achievement of the head of household, the number of years that migrants have stayed in the city, the average income of the migrant household, and the average monthly total housing costs all have a very weak relationship with housing poverty. This is a significant finding as it confirms the general understanding that migrant labourers in China belong to a weak social and economic group in cities. All migrants regardless of their background face similar economic and social difficulties. In other words, the poor living conditions of migrants are the result of the institutional arrangement in which migrants work and live. The importance of institutional rather than personal factors is further demonstrated by the hukou status of migrants. Urban originated migrants are far less likely to be in overcrowded housing and poverty in comparison to those who originate from rural areas.

Of those predictors that do have a strong influence, several types of variables can be identified. The number of people in the household, the number of dependants who have remained in the original home, and whether the migrant owns a property back at their original home, are predictors that have an effect on housing poverty. The larger the size of the household in the city, the less likely it will be in housing poverty. Married couples living in the city may be in a stronger financial position to rent more space; they are more likely to live independently rather than share rooms. Those with more dependants in their original homes and those who own property back in their original home tend to spend less on rent in the city. Migrants staying in the city alone tend to sacrifice more in terms of living conditions than those who have brought their families with them. These relationships signify that the problems of migrant living conditions in cities should be studied within a broader context and should include household characteristics of the original home.

Migrants' perceptions of their prospects in the city and their future are important factors influencing their housing choice. Those who feel happier about their life in the city and have plans to stay are less likely to be in housing poverty than those who are not very satisfied with their achievement in the city and intend to move to other places.

Employer provided accommodation is normally in the form of dormitories and rooms for sharing by several individuals. Housing poverty and overcrowding is most common in this group. Private rental is the other tenure that has a strong association with housing poverty among migrants. This could be explained from both the institutional restrictions and personal circumstances. On the institutional side, poor quality private rental housing is the main sector for low-income migrants. Better quality and properly built housing is too expensive for this group of people. On the personal side, every migrant has to give careful consideration about how to use their limited income. Sharing is the main and most effective strategy to save money for other purposes.

Conclusion

In comparison with official urban residents, housing and living conditions of migrants are relatively poor (Wang, 2000, 2005; Wu, 2004, 2006). Better off migrants can only afford to rent a very small flat, whilst others have to share rooms. Urban villages provide low paid migrant workers with the first step toward affordable housing in large cities. In Shenzhen, a city growing at extraordinary speed, migrant housing conditions are no worse than those found in other cities. In comparison with what the authors have found in Chongqing and Shenyang in earlier studies (Wang, 2003, 2004), the housing conditions in urban villages in Shenzhen are in fact slightly better. Most migrants in the city live in new buildings. Although the quality of these buildings is not as good as in officially planned housing estates, they offer better accommodation than the run-down traditional houses found in other cities.

Urban villages in Shenzhen provide good locations for migrant workers. Because the city developed from a small border town, many villages occupy central areas inside the new city. This locational advantage enables migrants to live close to work and cuts down travel time and costs. Due to the shared cultural and professional background of rural migrants and the local village residents, the rental tenure is relatively safe and secure. Amenities in urban villages may not be as extensive as those in properly built new housing estates, but they are affordable.

In this sense, the Shenzhen urban village model does provide an alternative to housing the poor in developing countries. Local rural residents provided affordable housing here to the large number of low-income migrants in 'urban villages' as rental accommodation

with some basic, but modern, amenities. This approach has avoided the problems of slums in other developing countries. It differs from the public housing, aided self-build, self-helping, site and services/upgrading and the UN/World Bank enabling and support policies reviewed in the second section. The approach resembles some of the ideas promoted by Turner (1976), e.g. with no government support, flexible in meeting the diverse needs of migrants, balanced by the demand and supply through the market, less emphasis on the design standard and being affordable to those with low incomes. However, this urban village approach is a different type of self-help with a unique partnership between local rural residents and migrants. Large-scale village rental housing development is a type of self-help initiated by local villagers (the landlords) in response to the loss of agricultural land and production resources. Migrants (the users) are their customers and tenants. The rent levels are determined by the demand from the market. This market approach is in line with the recent World Bank prescriptions. However, this housing provision itself is outside the formal urban housing market promoted and supported by the municipal government. Land access rights, property ownership, housing credits and finance systems, emphasized by international organizations, are irrelevant to most migrants living in Shenzhen's urban villages. Shenzhen's urban villages provide a different model of informal housing.

Whether this urban village approach could be replicated anywhere else may depend on the local and national land and housing policies. In Shenzhen and other Chinese cities, the village collective ownership of land and the lack of effective government control and private investment are other key features of the village housing development model. Rural land in China is owned by villages collectively (instead of state ownership). Commercial developers and the municipal government have to pay compensation for taking over land from villages for development. Fresh agricultural land is normally the prime target for development. Village residential land is much more expensive and the relocation of original village residents is also very expensive. This is one of the main reasons for the Chinese urban village phenomenon. Urban planning is exercised on the public owned land in cities, while village land use is subject to a different type of control. This provides the villagers with some advantage in building their houses on their family plots. Indeed, Shenzhen municipality tried several times, unsuccessfully, to control the housing expansion in urban villages. The demand from the market was just too strong.

The positive contributions of urban villages during the particular stage of fast industrialization started to fade when the cities began restructuring and pursuing high-tech and finance-oriented development. The once dynamic informal housing market has gradually become a problem for urban planners and officials. Some refer to the urban villages as 'cancers of modern cities, with poor living environment and high crime rates'. There is a tendency for large-scale urban village redevelopment in order to improve the modern image of the city. Redevelopment plans are often drawn up without consulting the migrants living in these villages. Such action should be taken very carefully to avoid the mistakes other developing countries have made and that Turner has criticized (1976, 1988). On the surface the dramatic redevelopment aims to improve migrant living areas; in reality it results in the destruction of affordable housing in good locations. Poor migrants will be pushed further away into marginal locations, and large-scale urban village redevelopment will lead to more serious social and spatial division. Gradual improvements, upgrading, rent regulation and other softer policies may be more beneficial and sustainable. The authors support the recommendations of the UN-Habitat

report on Rental Housing, which stated that '... politicians should change their attitudes regarding current housing policies, and should try to do something practical to help those members of their society who live in rental housing, as well as the ones who can provide those dwellings' (UN-Habitat, 2003b, p. iii).

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References

- Burgess, R. (1992) Helping some to help themselves: Third World housing policies and development strategies, in: K. Mathey (Ed.) *Beyond Self-Help Housing* (London: Mansell).
- Chan, K. W. (1996) Post-Mao China: a two-class urban society in the making, *International Journal of Urban and Regional Research*, 20, pp. 134–150.
- Davin, D. (1999) Internal Migration in Contemporary China (Basingstoke: Macmillan Press).
- Fan, C. C. (2001) Migration and labour market returns in urban China: results from a recent survey in Guangzhou, *Environment and Planning A*, 33, pp. 479–508.
- Goodkind, D. & West, L. A. (2002) China's floating population: definitions, data and recent findings, *Urban Studies*, 39, pp. 2237–2250.
- Harris, R. & Giles, C. (2003) A mixed message: the agents and forms of international housing policy, 1945–1973, *Habitat International*, 27, pp. 167–191.
- Huang, Y. (2003) A room of one's own: housing consumption and residential crowding in transitional urban China, *Environment and Planning A*, 35, pp. 591–614.
- Jenkins, P., Smith, H. & Wang, Y. P. (2007) *Planning and Housing in the Rapidly Urbanising World* (London and New York: Routledge).
- Knight, J. & Song, L. (1999) *The Rural-Urban Divide. Economic Disparities and Interactions in China* (Oxford: Oxford University Press).
- Li, S. M. & Li, L. M. (2006) Life course and housing tenure change in urban China: a study of Guangzhou, *Housing Studies*, 21, pp. 653–670.
- Li, S. M. & Yi, Z. (2007) The road to homeownership under market transition: Beijing 1980–2001, *Urban Affairs Review*, 42, pp. 342–368.
- Liu, X. (2007) Urban village land use and industrial development (unpublished research brief).
- Lu, Z. & Song, S. (2006) Rural-urban migration and wage determination: the case of Tianjin, China, China Economic Review, 17, pp. 337–345.
- Ma, L. J. C. & Xiang, B. (1998) Native place, migration, and emergence of migrant enclaves in Beijing, *China Quarterly*, 155, pp. 546–581.
- Mobrand, E. (2006) Politics of cityward migration: an overview of China in comparative perspective, *Habitat International*, 30, pp. 261–274.
- Payne, G. (Ed.) (2002) Land, Rights and Innovation: Improving Tenure Security for the Urban Poor (London: ITDG).
- Pugh, C. (1995) The role of the World Bank in housing, in: B. Aldrich & R. Sandhu (Eds) *Housing the Urban Poor. Policy and Practice in Developing Countries*, pp. 34–92 (London: Zed Press).
- Pugh, C. (1997) The changing roles of self-help in housing and urban policies 1950–1996: experience in developing countries, *Third World Planning Review*, 19, pp. 91–109.
- Rakodi, C. & Lloyd-Jones, T. (2002) *Urban Livelihoods: A People-Centred Approach to Reducing Poverty* (London: Earthscan).
- Renaud, B. (1981) National Urbanization Policy in Developing Countries (New York: Oxford University Press).
- Shen, J. (1995) Rural development and rural to urban migration in China 1978–1990, *Geoforum*, 26, pp. 395–409.

- Sheng, L. (2009) The impact of financial crisis on China's rural migration. Paper presented at the CASS-ESRC Joint Workshop on Migration and Labour Markets, 8–9 June 2009, Beijing.
- Shenzhen Municipal Bureau for Land Resources and Property Management. Monthly official briefs between 2005 and 2008. Available at http://www.sztj.com/main/xxgk/tjsj/tjgb/gmjjhshfzgb
- Shenzhen Municipal Housing System Reform Office (with Shenzhen Municipal Land Resources and Property Management Bureau and Project Group for Housing Problems of the Urban Temporary Population) (2004) Main report for the project on housing problems of the urban temporary residents (unpublished internal report) (Shenzhen: Mimeo).
- Shenzhen Real Estate Yearbook, 2005 (The Editorial Committee for Shenzhen Real Estate Yearbook) (Shenzhen: Haitian Press).
- Shenzhen Statistical Yearbook 2008. Available at http://www.sztj.com/main/xxgk/tjsj/tjnj/index.shtml?catalogId=14497.
- Solinger, D. J. (1999) Contesting Citizenship in Urban China, Peasant Migrants, the State and the Logic of the Market (Berkeley, CA: University of California Press).
- Turner, J. C. (1976) Housing by People (London: Marion Boyers).
- Turner, J. C. (1986) Future directions in housing policies, *Habitat International*, 10, pp. 7–26.
- Turner, J. C. (1988) Introduction, and conclusions, in: B. Turner (Ed.) Building Community (London: Building Community Books).
- UN-DESA (2007) Millennium Development Goals Report 2007 (New York: UN Department of Economic and Social Affairs - DESA).
- UN-Habitat (2003a) Global Report on Human Settlements 2003: The Challenge of Slums (London: Earthscan).
- UN-Habitat (2003b) Rental Housing: An Essential Option for the Urban Poor in Developing Countries (Nairobi: UN-Habitat).
- Wakely, P. (1988) The development of housing through the withdrawal from construction: changes in Third World housing policies and programmes, *Habitat International*, 12, pp. 121–131.
- Wang, Y. P. (2000) Housing reform and its impacts on the urban poor, *Housing Studies*, 15, pp. 845–864.
- Wang, Y. P. (2003) Living conditions of migrants in inland Chinese cities, *The Journal of Comparative Asian Development*, 2, pp. 47–69.
- Wang, Y. P. (2004) Urban Poverty, Housing and Social Change in China (London and New York: Routledge).
- Wang, Y. P. (2005) Low-income communities and urban poverty in China, Urban Geography, 26, pp. 222-242.
- Wang, Y. P. & Wang, Y. (2009) Housing and migrants in cities, in: R. Murphy (Ed.) *Labour Migration and Social Development in Contemporary China*, pp. 137–153 (New York and Abingdon: Routledge).
- Wang, Y. P., Wang, Y. L. & Wu, J. (2009) (forthcoming) Urbanisation and informal development in China: urban villages in Shenzhen, *International Journal of Urban and Regional Research*.
- World Bank (1991) Urban Policy and Economic Development: An Agenda for the 1990s. Policy paper (Washington DC: World Bank).
- World Bank (1993) Housing: Enabling Housing Markets to Work. Policy paper (Washington DC: World Bank).Wu, F. (2005) Rediscovering the 'gate' under market transition: from work-unit compounds to commodity housing enclaves, Housing Studies, 20, pp. 235–254.
- Wu, W. (2004) Sources of migrant housing disadvantage in urban China, *Environment and Planning A*, 36, pp. 1285–1304.
- Wu, W. (2006) Migrant intra-urban residential mobility in urban China, Housing Studies, 21, pp. 745-765.
- Zhu, Y. (2007) China's floating population and their settlement intention in the cities: Beyond the Hukou reform, *Habitat International*, 31, pp. 65–76.