

Age-differentiated impact of land appropriation and resettlement on landless farmers: a case study of Xinghua village, China

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Abstract

Land appropriation and subsequent resettlement of rural inhabitants are central to urbanisation in China. Often, the result is the impoverishment of landless farmers, who are a principal source of social unrest in the country. In the literature, landless farmers are often wrongly assumed to be a homogeneous group. In contrast, this paper presents the age-differentiated experiences of land appropriation and resettlement among farmers. Using the case study of Xinghua village in China, with data collected via surveys and interviews, we show that even within a single community, there can be significant age-related differences in terms of compensation, livelihood changes, income, living conditions, and satisfaction. Older farmers tend to receive more compensation, and the negative impact of land appropriation is felt most acutely by middle-aged farmers. Viewed from a broader theoretical perspective, this study demonstrates the importance of understanding the impact of land appropriation and resettlement and shows how this impact is distributed unevenly across the affected communities.

Keywords *land appropriation; resettlement; landless farmers; age; China*

Introduction

Large-scale land dispossession of rural communities is widespread in much of the developing world. In Southeast Asia, vast tracts of agricultural land in Vietnam have been appropriated by the state since the early 1990s to build industrial zones, to enable urban development, and to support other non-agricultural activities (Han & Vu, 2008; Suu, 2009). Official figures suggest that from 2001 to 2005 alone, over 2.5 million farmers were affected, and disagreements over the level of compensation and the loss of livelihood have resulted in frequent

public protests (Suu, 2009). Land grabbing in Sub-Saharan Africa is intensifying, driven by foreign investors and government agencies (Baglioni & Gibbon, 2013; Lavers, 2012; Lunstrum, 2016; Vermeulen & Cotula, 2010). Land enclosure in Africa has been linked to various motivations, including food and biofuel production, and tourism involving private game reserves, nature conservation, and large-scale mineral exploitation. The situation in Latin America and the Caribbean is similar: a new wave of government-backed foreign investments in agriculture and mining has resulted in the dispossession of many indigenous

communities (Borras *et al.*, 2012; Oliveira, 2013; Pedlowski, 2013).

Post-reform China is no exception to this global trend. Urban development in China is proceeding at a phenomenal pace. The built-up areas of China's cities have increased almost sevenfold from 7,438 km² in 1981 to 49,800 km² in 2010. Such rapid urban expansion cannot be achieved without the large-scale appropriation of rural land for development purposes. Through the coercive power of the state, land and property rights are transferred from farmers to private developers (He *et al.*, 2009). In eastern coastal China, where urbanisation proceeds at a remarkable rate, arable land loss from 1996 to 2005 totalled 1,708,700 hectares (Liu *et al.*, 2008). According to estimations by members of the Chinese Social Science Academy, urbanisation in China has resulted in 40 to 50 million landless farmers (*shidi nongman*), and it is predicted that this figure will reach 110 million by 2030. Farmers who lose their land often resettle in urban areas. Their integration into cities is far from straightforward, however, and many who fail to find new livelihoods or adapt to urban lifestyles become trapped in a cycle of poverty when their compensation money runs are depleted (He *et al.*, 2009). Furthermore, although landless farmers lose or are forced to surrender their rural identities once they are no longer engaged in agricultural activities, they are often barred from gaining urban household registration (*hukou*) and its associated benefits (Liu *et al.*, 2010).

The land appropriation experiences of Chinese landless farmers remains an understudied area, especially when compared to the large body of research conducted from the perspectives of the government (He *et al.*, 2009; Lin *et al.*, 2015; Lin & Ho, 2005; Lin & Zhang, 2015; Liu *et al.*, 2014; Song *et al.*, 2016; Wu *et al.*, 2013; Xu *et al.*, 2009; Zhang, 2000) and property developers (Lo & Wang, 2013; Pow, 2009; Shen & Wu, 2012). What is clear from these studies is that landless farmers are a disadvantaged group and obtain the least benefit from the appropriation process for several reasons: land requisition is crucial to government revenue; village-level corruption is endemic; and there is little legal protection of property and land rights. However, the impact of land appropriation on landless farmers has been insufficiently analysed. Examining the experiences of landless farmers is important for reasons more particular than the general aim of understanding their role as the subjects of an unjust social process. Resentment directed at land appropriation has been one of the 'externalities of development' responsible for the upsurge of social conflict and unrest in

China over the past two decades (Guo, 2001; Yep & Fong, 2009; Zewig, 2000). Therefore, there is an urgent need to devise a fairer and more inclusive development model—one that will require a better understanding of the impact of land appropriation and resettlement on affected farmers.

This paper addresses the following problem in the literature: landless farmers are often presented as a homogeneous group, a situation resulting in oversimplified analyses and conclusions. We do not make such an assumption when evaluating the impact of land appropriation on landless farmers. Instead, our analytical focus is on understanding how the appropriation process can be experienced differently among landless farmers in different age groups. We argue that it is important to understand the differences among landless farmers both from a theoretical perspective and from a practical policy perspective to design a progressive land appropriation policy.

The paper proceeds in four parts. The next section contextualises the discussion of landless farmers within a broader picture of urban development and land appropriation. The study method is then presented, followed by the results. The paper concludes with final thoughts and policy recommendations.

Background

Urbanisation, land appropriation, and landless farmers

Since the 1990s, a number of institutional factors have been driving local governments in China to engage in an almost zealous pursuit of urbanisation, most notably in the establishment of development zones and eco-cities (Joss & Molella, 2013; Wu, 2012; Yang & Wang, 2008; Zhang, 2014). The reformulation of central-local relations through the decentralisation of state power has re-established the local responsibilities of urban governance (Lin *et al.*, 2015; Wu, 2000). Such political decentralisation has stimulated local enthusiasm for economic growth and unleashed fierce competition among cities. This economic competition drives local governments to upgrade the urban built environment to attract increasingly mobile labour and capital. At the same time, the recentralisation of tax revenue collection and distribution has reduced local tax revenue and created an imbalance between local responsibilities and the resources available to fulfil them. In this context, the mobilisation of capital through the commodification and development of land is

crucial to fund the upgrade of urban environments and other social and economic responsibilities (Lin & Zhang, 2015). From the perspective of local governments, land conveyance revenue is the most lucrative option under the current fiscal arrangement, as the income need not be remitted to the central government. The significance of this land finance model is underscored by recent research, which shows that income from expropriated land in the form of transaction fees, surcharges, and taxes has increased and now contributes approximately one-third of total municipal revenue and nearly 40 per cent of funds used for urban development and maintenance (Lin & Zhang, 2015).

The close relationship between land appropriation, local tax revenue, and urban development puts farmers in a difficult situation. Most researchers recognise that the impact of land appropriation on farmers is mostly negative. Unemployment and low incomes prevail among dispossessed farmers, reflecting both their difficulty in finding non-farm jobs and the low levels of compensation they receive, which makes it difficult for them to engage in entrepreneurial activities (Bao & Peng, 2016; He *et al.*, 2009). Concurrently, there are concerns over widespread and institutionalised corruption and black market land transactions that involve every level of government and all types of agencies (Cai *et al.*, 2013; Hui & Bao, 2013; Sargeson, 2012). It has often been argued that resulting and inadequate levels of compensation to affected farmers directly contribute to their impoverishment (Guo, 2001; Zhu & Prosterman, 2007). This inadequacy is especially problematic because welfare provisions and social security in China are underdeveloped. Depriving farmers of land, which serves as an important safety net, without providing alternatives puts great pressure on an already vulnerable group of people (Li & Piachaud, 2006). Although crucial, government compensation is short term. What has not been studied thoroughly is the long-term impact of land appropriation as it relates to farmers' difficulties in adapting to urban lifestyles post-resettlement. A key concern is the combination of farmers' lack of education, of occupational experience, and of support received from the government. These factors make it very difficult for landless farmers to adapt to urban life (Zhu & Prosterman, 2007). Notwithstanding, few studies have systematically assessed the impact of land appropriation on the livelihoods and living conditions of landless farmers to reveal the extent to which they have adapted to urban life. The literature has treated landless farmers as a uniform group, assuming that

they experience similar challenges and react in the same manner regardless of individual differences.

The rural land appropriation system China's rural land system in the post-reform era distinguishes between land ownership and land-use rights. Rural land is owned by the village collective, represented by democratically elected, self-governing village committees (*cunweihui*) (Guo, 2001). Farmers are able to secure contractual land-use rights under the household responsibility system but cannot freely transfer their rights to others for non-agricultural uses (Krusekopf, 2002; Sargeson, 2004). Rural land can be used for urban purposes only after it has been transferred from collective to state ownership (Xu *et al.*, 2011). The only legal way to accomplish this transfer is through land appropriation initiated by local governments. Because land cannot be freely transferred in the market, its value is greatly diminished and becomes 'dead capital' to farmers (De Soto, 2001). On the other hand, as the monopoly suppliers of land for urban development, local governments are best positioned to capture surplus value created by land transfers (Yep & Fong, 2009). Under this arrangement, local governments are empowered and incentivised to use coercive force to acquire rural land cheaply, redistribute it at a profit to private developers, and invest the revenue in urban construction and other local priorities. This cheap land supply allows local governments to offer land at discounted prices to attract foreign direct investment and to benefit local pro-growth coalitions (Yang & Wang, 2008; Zhang, 2000).

The role of local governments and village committees is very important in China's land appropriation system. Typically, deals are directly negotiated between the two parties without consulting the affected farmers (Guo, 2001). Village committees almost always agree to local governments' requests because of economic interests and political pressures. Farmers' options are often limited to compensation packages and resettlement plans. Therefore, in the process of land appropriation, farmers' role is passive. Compensation typically covers the loss of farmland, crops, and residential land and the cost of resettlement—but there are significant regional variations (Chan, 2003; Guo, 2001). For example, standard compensation for farmland, as defined by the central government, is set at six to ten times the value of the average annual output of the land—an approach criticised as being unfair to farmers due to oftentimes astronomical differences between the agricultural value of land and potential land rent when land is converted to

non-agricultural uses (Zou & Oskam, 2007). Compensation may be paid in the form of money and real properties (typically apartment units). Because this compensation is distributed first to village committees, and only then to affected farmers, there is widespread corruption among village leadership—now a primary source of social unrest in land appropriation (Song *et al.*, 2016).

Method

Study setting: Xinghua village

The former Xinghua village was located in the Changchun High-Tech Development Zone, a national development zone approved by the State Council in 1991 (Figure 1).

The land appropriation and resettlement of Xinghua village was typical for Northern China. The entire Xinghua village—including farmland (*chengbaodi*), residential land (*zhajidi*), and private plots (*ziliudi*)—was appropriated by the municipal government in 2009, which differs from the situation in some southern cities, where the government appropriates farmland but allows landless farmers to retain their properties and residential land (Hao *et al.*, 2011; Liu *et al.*, 2010; Tian, 2008). This appropriation was to make way for a mix-used development project including a 527,000 m² Olympic Park, a 11.97 km² wetland park, a 17.84 km² new central business district, a university park with several university campuses and leading research institutions, and plans for five high-technology industrial parks. At the time the land was appropriated, the village had 980 households and 3,480

people. All were resettled the same year into a newly developed residential neighbourhood known as Xinghuayuan, located within the former administrative boundary of Xinghua village.

Data collection

The fieldwork for this study was conducted in January 2014, approximately five years after the initial land appropriation and resettlement. The fieldwork was conducted in Xinghua village and consisted of a questionnaire-based survey of landless farmers and in-depth semi-structured interviews with former village officials and landless farmers. The survey was used to establish a baseline understanding, and the interviews were conducted to help interpret the survey findings and to understand procedural aspects of land appropriation. To recruit respondents, a face-to-face approach was employed by visiting them at home. If the head of household was not at home, the address was skipped because we aimed at the head of household as our respondents. Visits took place at varying times of day, including evenings, to prevent the under-representation of working people. The face-to-face approach was employed to increase respondent’s participation. However, a ‘natural’ bias existed in the sampling strategy because we could not capture the involvement of people who were not home. In total, 386 valid questionnaires were collected.

Because we hypothesised that age was one of the most important differentiating factors affecting the compensation, the livelihoods, and the living condition, we chose age as the sole variable to

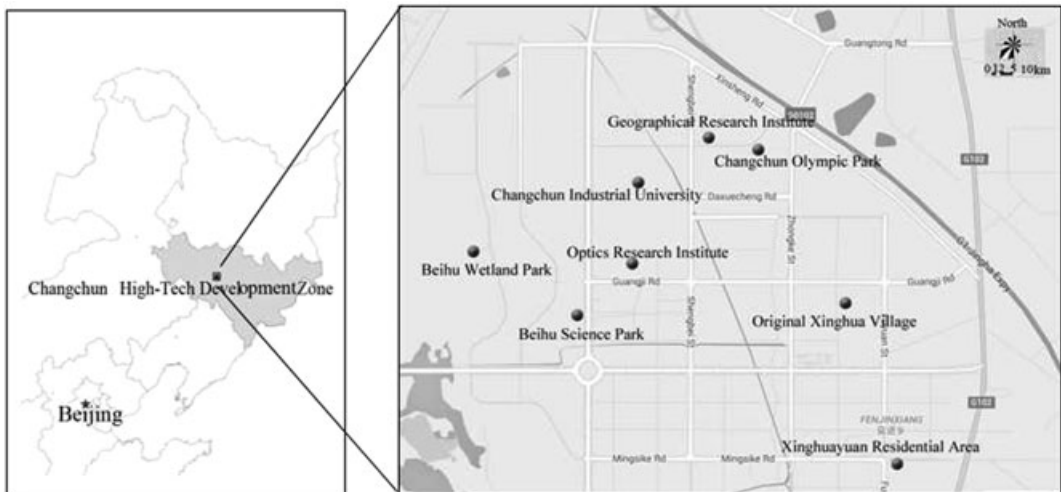


Figure 1 Location of Xinghua village

reveal how the impact of land appropriation can be felt quite differently among affected farmers. Older farmers over the age of 60 had spent much of their lives living in poverty; they had limited formal educational qualifications and limited job skills. Farmers in the 50 to 60 age range grew up during the planned economy period and were used to the collective agriculture system. Their education levels were still low but more advanced than older farmers. Those between 30 and 50 years of age experienced the transition from planned economy to market economy in their youth. Most of them received elementary education, and some had secondary or even tertiary education. Most of them have experienced working in non-farm sectors. Farmers between 18 and 30 are the youngest adult generation. They have better education and work skills than the previous generation. Most of them leave the farmland to their parents and take up jobs in towns or cities.

According to our survey, eight per cent of the respondents are in the 18 to 30 age group, 44 per cent in the 30 to 50 age group, 24 per cent in the 50 to 60 years age group, and 24 per cent were 60 or older. This age structure is typical of China's rural populations. Also typical of rural populations are lower education levels: 94 per cent of the respondents have junior secondary (nine years) or less education and only one per cent have college or university degrees. The average household size is 3.37 people, which is smaller than the traditional rural family and comparable to urban households. This result suggests that large households have been broken up into smaller households during the resettlement process. As the living space of new apartments is smaller than original living spaces, most respondents received two apartments, used to house two generations. The two apartments are always located on the same floor of the building to make caring for family members more convenient.

Results

Compensation

Compensation for the Xinghua villagers was determined in a top-down fashion based on policy published by the municipal government with which landless farmers had no opportunity to negotiate their compensation packages.

Affected farmers received three types of compensation. The first type of compensation was a lump-sum payment for the loss of farmland, determined based on the potential value of the land. According to the most updated compensation table

published by the municipal government, the compensation rate was determined by location and was segmented into seven spatial zones: 160 RMB/m² for zone 1, 120 RMB/m² for zone 2, 100 RMB/m² for zone 3, 80 RMB/m² for zone 4, 70 RMB/m² for zone 5, 65 RMB/m² for zone 6, and 50 RMB/m² for zone 7. Zone 1 referred to land in close proximity to the city, usually located within the third ring road. Zone 2 was located farther away from the city, usually between the third and the fourth ring roads, and so on. Xinghua village consisted of two zones: the part of the village south of the Changchun Ring Expressway was classified as zone 5 (70 RMB/m²), whereas the part north of the expressway was classified as zone 7 (50 RMB/m²). However, as noted elsewhere, not all compensation was passed on to the farmers. According to our interview with the former village head, 70 per cent of the compensation was passed on to the farmers and 30 per cent was retained by the village committee for social security purposes. In addition to basic land compensation, vegetables (not ready to harvest) at the time of appropriation were compensated at a rate of 3.5 RMB/m². For other types of crops, the compensation was 2 RMB/m².

The second form of compensation was a relatively new policy initiated by the Changchun municipal government to provide a pension for landless farmers over the age of 60. Participation in the scheme required the consent of two-thirds of the members of the village. To fund the pension, the villagers contributed 20 per cent, the village committee contributed 40 per cent, and the municipal government contributed 40 per cent. Landless farmers over age 60 received a pension of 215 RMB per month. According to information gathered from interviews, money contributed by the village committee was drawn from the money it retained from land compensation. Therefore, in reality, villagers contributed as much as 60 per cent of the pension fund.

The third form of compensation was an apartment similar in size to the original dwelling. The regulation stipulates that if the original dwelling is smaller than 90 m², then the new apartment cannot be larger than 84 m². The difference in size between the new and original dwellings was offset at 1,350 RMB/m². For example, a family with an original dwelling of 80 m² can choose an apartment up to 84 m². If they chose 84 m², they would need to pay 5,400 RMB for the difference in size. Conversely, if they choose to downsize to a 60 m² apartment, they would be compensated with 27,000 RMB. If the original dwelling is 90 m² or larger, then the family is eligible for two apartments, but the added space cannot be greater than

20 m² per apartment. For example, a family with an original dwelling of 100 m² can be compensated with two apartments, but the total size of the two apartments cannot be greater than 140 m². Finally, households with less than 90 m² of housing but with more than four household members were allowed to purchase an additional apartment at a special rate (the first 49 m² at 1,350 RMB/m², over 49 m² at 2,000 RMB/m²).

Table 1 lists the compensation received by the respondents. Average compensation was 282,600 RMB and 1.42 apartment units per household. The average annual income for rural households in Changchun was 12,718 RMB in 2011. Therefore, the compensation was approximately 22 times the annual rural household income. However, this compensation figure is less impressive when compared with urban household income, which was 21,989 RMB in 2011. Using this yardstick, the compensation becomes 13 times the annual household income.

Our findings suggest that older villagers received substantially more cash compensation than younger villagers; this is because in Xinghua village, inheritance rights were respected and parents were allowed to pass on their 30 year land entitlements to children. Under this arrangement, older farmers acquired more contracted land than younger farmers through inheritance. There were no

significant age-related differences in terms of the number of apartment units the farmers received.

Several criticisms were voiced by the farmers during our interviews. First, the loss of land also meant losing a low-cost way of life. Before appropriation, most respondents were largely self-sufficient in terms of their food. After appropriation, food had to be purchased from markets, resulting in higher costs of living. Another common complaint about the cost of living is the property management fee and the increase in utility fees. Second, farmers did not receive their compensation in full because, as mentioned previously, 30 per cent was withheld by the village committee. Third, many older respondents felt that the 215 RMB-per month pension was not enough to live on. The fourth criticism has to do with apartment compensation and spaces being too small. This comment mostly came from middle-aged villagers with unmarried sons who wanted their sons to have space to establish their own families once they marry. Otherwise, when a son marries, he and his wife have to live with his parents. Fifth, the distribution of compensation had not been fair. There was a widespread perception that those with the right type of connections and money can obtain additional apartment units. The extent of corruption was not evident in the survey data, but the sentiment was that the compensation process was not transparent, which contributed to a lack of trust among the landless farmers.

Table 1 Average compensation per household

Age group	18–30	31–50	51–60	Over 60	Total
Cash (RMB)	229,900	226,300	319,800	292,000	282,600
Apartment unit	1.53	1.37	1.42	1.49	1.42

Source: survey data in Xinghua village

Table 2 Household occupation change (%)

Age group	18–30	31–50	51–60	Over 60	Total
<i>Before land appropriation</i>					
Only farming	10.00	17.06	45.65	66.67	35.32
Farming and odd jobs	76.67	74.71	50.00	26.88	57.40
Farming and small businesses	6.67	4.71	2.17	3.23	3.90
Farming and regular jobs	6.67	3.53	2.17	3.23	3.38
<i>After land appropriation</i>					
Odd jobs	76.67	87.06	65.22	24.73	65.97
Small businesses	10.00	4.12	3.26	3.23	4.16
Regular jobs	10.00	2.94	5.43	3.23	4.16
Jobless	3.33	5.88	26.09	68.82	25.71

Source: survey data in Xinghua village

Changes in livelihood

Table 2 compares household occupations before and after land appropriation. Before land appropriation, most households were either engaged only in farming (35.3%) or in a combination of farming and odd jobs (57.4%). Very few households ran small businesses (3.9%) or were in regular paid employment (3.2%). There is a strong difference in terms of age. The majority of households (66.7%) in the over-60 age groups engaged only in farming, whereas the majority of households in the 18 to 30 age group (76.7%) and the 31 to 50 age group (74.7%) both farmed and performed odd jobs.

After land appropriation, farming was no longer a possible means of earning a livelihood. Overall, the proportion of households dependent on odd jobs increased to 66 per cent. The proportion of households that ran businesses or were in regular paid employment however increased only slightly. A significant portion of the households became jobless (25.7%).

Overall, the impact of land appropriation on livelihood is quite different across age groups. For the over-60 age group, land appropriation means retiring and living on compensation money. For the 31 to 50 and 51 to 60 age groups, land appropriation and the loss of farming as a means of livelihood have compelled these individuals to take up odd jobs. For farmers in the 18 to 30 age group, the impact has not been significant because most of them were already performing odd jobs before land appropriation. As a result, jobless rates increase with age: 3.3 per cent for the 18 to 30 age group, 5.9 per cent for the 31 to 50 age group, 26.1

per cent for the 51 to 60 age group, and 68.9 per cent for the over-60 age group. The 18 to 30 age group had the highest proportion of running a business (10.0%) and securing regular paid employment (10.0%).

From the interviews, we learned that although the landless farmers preferred to be employed permanently rather than perform odd jobs that were less secure, there were numerous barriers to job attainment. First, after land appropriation, there was a severe lack of opportunities in the area surrounding the resettlement site. Most of the old factories were relocated or shut down to make room for new developments. At the time of our fieldwork, there was only one factory located in close proximity to Xinghuayuan. Moreover, other new developments, such as schools and shops, did not offer many permanent employment opportunities to the farmers. The second barrier to employment was the lack of vocational training and support from the government. All of this contributed to the strong feeling among the landless farmers that they had been abandoned by the government after land appropriation.

Changes in income

Table 3 compares household income before and after appropriation. Before appropriation, the 18 to 30 age group had the highest level of income, with 50 per cent earning over 30,000 RMB annually and 40 per cent earning between 20,000 and 30,000 RMB. The over-60 age group was the poorest, with only 25.8 per cent earning over 30,000 RMB and 24.7 per cent earning between 20,000 and 30,000 RMB. The 31 to 50 and 51 to

Table 3 Household income changes (%)

Age	18–30	31–50	51–60	Over 60	Total
<i>Before land appropriation</i>					
<10,000 RMB	0.00	4.71	7.53	15.05	7.51
10,000–20,000 RMB	10.00	21.18	17.20	34.41	22.54
20,000–30,000 RMB	40.00	28.82	31.18	24.73	29.27
>30,000 RMB	50.00	45.29	44.09	25.81	40.67
<i>After land appropriation</i>					
<10,000 RMB	3.33	7.65	33.33	79.57	30.83
10,000–20,000 RMB	13.33	28.82	21.51	8.60	20.98
20,000–30,000 RMB	53.33	37.65	32.26	9.68	30.83
>30,000 RMB	30.00	25.88	12.90	2.15	17.36
<i>Change in income</i>					
Increase	6.67	16.47	7.53	4.30	10.62
Unchanged	60.00	43.53	32.26	19.35	36.27
Decrease	33.33	40.00	60.22	76.34	53.11

Source: survey data in Xinghua village

60 age groups were between these two extremes. The differences can be explained by the fact that younger farmers took up more odd jobs than older farmers, and these jobs paid better than farming.

After land appropriation, all age groups suffered a decline in income, but the differential earning pattern persisted. The negative impact is the weakest in the 18 to 30 age group and the strongest in the over-60 age group. Overall, 53 per cent of the respondents reported a decline in income, 36 per cent no change, and 11 per cent an increase in income. The percentages of respondents reporting a decline in income in the over-60 age group, 51 to 60 years age group, 31 to 50 age group, and 18 to 30 age group are 76 per cent, 60 per cent, four per cent, and 33 per cent, respectively. The changes in income are closely related to changes in livelihood. Work experience before land appropriation played a significant role in respondents' finding new jobs and maintaining their income level. The older respondents suffered the biggest loss in income because the loss of their farmland meant that they lost their only form of income. The impact on younger farmers was less severe because most of them already had urban jobs before land appropriation.

Effects of appropriation on living conditions

Land appropriation and resettlement have significantly improved the living conditions of the villagers. Before the resettlement, they lived in

one storey brick or earthen houses (Figure 2). There were few facilities other than basic electricity and water services. During winters, villagers relied on firewood, charcoal, or coal for heating. Obtaining these fuels was time-consuming and burning them generated hazardous indoor air pollution. Access to transport was very poor. The local road was unpaved and narrow, and only one public bus connected the village to the city.

After resettlement, the villagers moved into modern residential buildings (mostly six storeys high, Figure 3). The apartment units came furnished with basic amenities such as toilets, kitchens, and bathrooms. Therefore, the villagers did not have to spend much money on furnishing their homes, with the average household spending only approximately 20,000 to 30,000 RMB on interior decorations and furnishings. Heating was provided via district heating systems. To alleviate cost-of-living pressures, the government promised to provide free heating for 10 years. The residential neighbourhood was landscaped and equipped with pedestrian walkways. A number of modern property services such as security, garbage collection, and property maintenance were provided by a professional property management company for a fee. The neighbourhood also featured a large market and a number of shops and restaurants. A first- to ninth-grade school was built on the western side of the neighbourhood, as well as a community clinic to provide basic health care to the residents. Transportation improved as well: the residential



Figure 2 Original village



Figure 3 Xinghuayuan residential area

neighbourhood was serviced by two public bus lines to the city centre.

In the survey, respondents were asked to evaluate the changes in their living conditions before and after land appropriation. A score of 3 was given to those who reported a positive change, a score of 2 to those reporting no change, and a score of 1 to those reporting a negative change. Table 4 presents the results.

The difference among different age groups is not significant. Most of the villagers reported that housing quality, environment, and transport had improved. In terms of relationships with neighbours, the general sentiment was that there had been little change. This is not surprising considering that the entire village was resettled to the same place, thereby preserving the community and its connections. However, the villagers reported feeling negative about the standards of education,

health care, and safety. This was because although the new school had better facilities and was located closer to where they lived, its level of resources and the quality of its teachers were not good. Similarly, they thought that the new community clinic had very limited resources. For serious illnesses, they still preferred to go to the larger hospitals in the city. Regarding safety, although the residential area was built as a gated community to improve security, the gates were not staffed by security guards and anyone could access the neighbourhood. Moreover, the villagers were now living among strangers, which also contributed to a feeling of insecurity.

Overall satisfaction and outlook

The landless farmers overwhelmingly reported that they were not used to living in an urban

Table 4 Perception of change in living environment (%)

Age group	18–30	30–50	50–60	Over 60	Total
Housing	2.81	2.81	2.73	2.76	2.78
Environment	2.81	2.83	2.84	2.88	2.84
Transport	2.9	2.91	2.91	2.96	2.92
Education	1.66	1.67	1.61	1.57	1.63
Healthcare	1.86	1.77	1.74	1.89	1.80
Safety	1.69	1.56	1.59	1.63	1.59
Neighbour relations	2.03	2.00	1.97	2.13	2.03

Source: survey data in Xinghua village

environment, even though it had been almost five years since the appropriation. Respondents from the 31 to 50 age group reported the lowest degree of adaptability. This is likely because they were subjected to the highest degree of family responsibilities such as managing the education of their children and the health of their elderly parents, and therefore were under the greatest pressure. Furthermore, they were less likely to find stable employment than the younger landless farmers and were not old enough to receive pension. For the same reasons, while the majority of respondents across all age groups stated that they were not satisfied with their new lives, middle-aged respondents from the 31 to 50 and 51 to 60 age groups had higher rates of dissatisfaction. In terms of changes in living standards, opinions were less negative: 34 per cent of respondents indicated that living standards had improved, 29.5 per cent reported standards as unchanged, and 36.5 per cent reported them as worse. Respondents from the 31 to 50 age group had a distinctively more negative evaluation of the change in living standards (Table 5).

Finally, views about the future were quite negative, with 87.3 per cent of the respondents worrying about the future. Respondents from the 18 to 30 age group were slightly more positive about the future compared with older respondents. In our interviews, a commonly raised concern about the future was what would happen when the compensation money ran out and there would be no steady income.

Discussion and conclusion

This paper has examined the age-differentiated impact of land appropriation and resettlement on landless farmers from the perspectives of compensation, livelihoods, income, and living conditions. Landless farmers from the Xinghua village received a lump-sum payment depending on the size of their contracted land and its location. They also received one or two apartment units depending on the size of their original dwellings. In terms of livelihoods, the key impact of the end of farming has been the increased levels of unemployment and underemployment. Consequently, the majority of villagers experienced a decline in income. The impact on living conditions is more positive, at least with regard to housing conditions, environment, and transport. However, villagers perceive the quality of education and health care as having declined, despite the new facilities available to their community. The impact of land appropriation and resettlement on landless farmers was once thought to be comparatively homogeneous.

This paper has shown that the impact can be felt quite unevenly depending on age. The older landless farmers received the highest compensation and became retirees. The younger farmers received the lowest compensation, but their livelihoods were not significantly disrupted because of their prior experience with non-farm employment. The negative impact of land appropriation was felt most acutely by middle-aged landless farmers. Not only were they less employable than younger

Table 5 Adaptation to and satisfaction with the new lifestyle (%) (please refer to this table in the text)

Age group:	18–30	31–50	51–60	Over 60	Total
<i>Adapted to urban life</i>					
Positive	26.67	14.12	33.33	20.43	21.24
Average	20.00	17.65	20.43	30.11	21.50
Negative	53.33	68.24	46.24	49.46	57.25
<i>Satisfaction with new life</i>					
Satisfied	6.67	2.35	17.20	11.83	8.55
Average	33.33	22.94	8.60	45.16	25.65
Not satisfied	60.00	74.71	74.19	43.01	65.80
<i>Changes to living standards</i>					
Better	36.67	27.65	34.41	44.09	33.94
Unchanged	30.00	29.41	33.33	25.81	29.53
Worse	33.33	42.94	32.26	30.11	36.53
<i>Views about the future</i>					
Worried	76.67	88.82	87.10	88.17	87.31
Not worried	16.67	8.24	8.60	8.60	9.07
Don't know	6.67	2.94	4.30	3.23	3.63

Source: survey data in Xinghua village

farmers, they also had greater family responsibilities and were therefore under the most severe economic pressure. Viewed from a broader theoretical perspective, this paper highlights the importance of understanding that the impacts of land appropriation and resettlement are unevenly distributed across affected landless farmers. Further studies should look at the role of other differentiating factors such as gender, ethnicity, and socioeconomic status.

China is still at an early stage of accelerated urbanisation; most models project that the urbanisation rate will not decelerate until at least 2030 (Shen *et al.*, 2005). Millions of farmers will experience land appropriation and resettlement and then integrate into cities and adapt to urban lifestyles. Land appropriation has forced landless farmers to shift their employment from a primary industry to secondary or tertiary industries. Resettlement has changed the physical form of the entire village from a rural settlement to an urban residential area and has helped to realise the rapid urbanisation of the landscape. However, landless farmers suffer considerably in the process of land appropriation because of limited compensation, difficulties in finding employment, the high cost of urban lifestyles, and so on. Therefore, to help landless farmers adapt to urban life, three important points need to be recognised. First, it is important for landless farmers themselves, especially middle-aged farmers, to improve their job skills and overcome the challenges of adapting to an urban lifestyle. The government should organise training programmes to equip farmers with vocational skills, provide employment guarantees or opportunities, conduct workshops on starting a business, and offer start-up funding to small businesses. Most landless farmers we interviewed do not expect to become wealthy citizens and own several properties. Rather, they want to earn enough to provide for their families and allow their children to lead fulfilling lives. They are willing to work hard, but the challenges they face are daunting. Second, fostering social cohesion among the new community of strangers in a resettlement is important, not only from a social capital perspective but also to address residents' safety concerns. Organising community events on a regular basis and establishing community organisations can be useful in reproducing the sense of community that is lost in land appropriation and resettlement. Third, better and fairer compensation is necessary. Without continuous government support and better compensation packages, it is difficult for villagers to adapt to urban life. It is troubling that when their

compensation money runs out in a few years, landless farmers will gradually slide into poverty. More important, the challenge of making land appropriation process and resettlement programme more just and acceptable is an issue that goes to the heart of social stability in China.

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