Post-Project Evaluation of China's Urban Slum Resettlement Program: The Case of Fushun City

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Urban slum redevelopment is a common problem facing global urbanization. One big difficulty when redeveloping an urban slum is to realize the sustainable renewal of the redeveloped area. Over the past ten years, the progress made in urban slum redevelopment of Chinese cities attracts worldwide attention. Taking Fushun, one of the first old industrial cities to carry out large-scale urban slum redevelopment plan as the case city, this article conducted a Post-Project Evaluation of the Penghuqu redevelopment plan by using the method of questionnaire survey as well as interviews with households and local officials. The aim is to elaborate on the influences of Penghuqu redevelopment project on the long-term sustainable improvements to the people, the communities and the districts involved. The results show that the Penghuqu redevelopment project improves resident's livelihood and community infrastructures. However, it also weakens the close neighbourhood relations of original communities. The sustainable development of resettlements is still facing challenges from the single function of redeveloped areas, aging facilities and resident's succession.

Keywords: Penghuqu redevelopment; Post-Project Evaluation; old industrial cities; sustainable livelihood; community reconstruction

As a result of rapid economic growth and socio-spatial transformation in China, many residential areas within old industrial cities or rust industrial belts have fallen behind along with its residents, especially those residential areas belonging to the former State Owned Enterprises (SOE) (Wang et al., 2013; Huang and Li, 2014). These areas are often referred to as *Penghuqu* in Chinese character, which is similar to the terms of slums and squatter settlements. The typical issues in *Penghuqu* include poor living conditions, low income of its residents and inadequate infrastructure. However, the cause of formation, constitution of residents and land use legitimacy

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of *Penghuqu* are significantly different from slums; it is a district of poor urban residents with Chinese characteristics.

Penghuqu was highly concentrated by state owned enterprise workers and most of them were formed in the early stage of China's industrialization and urbanization in order to facilitate production and living. These houses were built with poor materials, few or even no amenities or facilities around mining quarries and factories. In spite of the above conditions, these houses were still regarded as luxury at that time as much of China's population lived in mud huts and shacks, especially in the countryside. However, in the 1990s, accompanying a deep reform of SOE is a large incidence of unemployment of workers, with no longer "from cradle to grave" employment, housing and medical treatment. This has left Penghuqu with a long-term lack of maintenance funds and services, turning these worker areas into poor areas that were constituted mainly of laid-off workers and their children.

Northeast China was the largest old industrial region with high proportion of its economy controlled by SOE. It was the cradle of China's industrialization and had contributed significantly to modern industry in China (Wang et al., 2013). The region became outdated due to the coastal region oriented development since the policy of opening up introduced by Deng Xiaoping in 1978. The *Penghuqu* in the region suffered the most: high unemployment leading to a large number of people living in poverty. The under-development of Northeast China attracted Chinese government's attention only after two decades. Since 2003, a large-scale of *Penghuqu* redevelopment plan in the old industrial cities had been proposed in governmental agenda along with the implementation of strategy of rejuvenating of old industrial cities in Northeast China. In 2005, Li Keqiang, the Secretary of the Communist Party of Liaoning Province, took the lead in exploring the sweeping transformation of Penghuqu in old industrial cities in Liaoning province (Department of Northeastern Region Revitalization, National Development and Reform Commission of China, 2013). The Penghuqu redevelopment scheme resettled its residents in newly built high buildings in the original places or other places to improve their living conditions. The rapid and efficient resettlement process with completion of the first district in 2005 resulted in redevelopment of more than 100,000 square meters of the *Penghuqu* in Liaoning province accomplished in 2009.

The completion of the *Penghuqu* redevelopment was deemed as a great success by several newspaper articles and government reports. Academic papers in response to the process also began to appear mostly assessing policy, changes to infrastructures and how much value the *Penghuqu* redevelopment could provide to the whole cities (Tang and Wei, 2008). Meanwhile, a number of researchers have pointed out issues existed in the *Penghuqu* redevelopment process, for example, poor location of resettled houses, fewer employment opportunities (Zheng, et al., 2008), rising cost of living for the residents, low income and instable jobs for most of the residents, and increasing debt of the residents (Ni, et al., 2012). These issues drive the continuous need to take sustainability of consequences of the *Penghuqu* redevelopment into

account. However, there are no researches that investigated whether the effects of the *Penghuqu* redevelopment are sustained. This paper will fill this research gap by conducting a post-project assessment of the *Penghuqu* resettlement.

We use Post-Project Evaluation (PPE) approach because of its relevance. It is believed that livelihood changes take place over long term, and the benefits will be materialized and brought to an individual or family after several years of the changes (Carney, 2013). In fact, there are some examples in other countries where slum clearances did not have any significant impact on the livelihoods of the people affected. This has led to a redeveloped area regressing back into a slum within a few years (Jim, 2000). In light of this, PPE for the Chinese *Penghuqu* redevelopment is useful in assessing the success of the project.

In this paper, we will conduct a PPE of the *Penghuqu* redevelopment in a typical old industrial city, Fushun city in Liaoning province, to evaluate the effectiveness of the *Penghuqu* redevelopment in offering long-term sustainable improvements to the districts, the communities and the people. Several approaches were utilized to better understand the effects of the redevelopment in different districts. Personal observations and interactions were utilized in the initial stage of the study to obtain general opinions of the people and the observable and physical effects of the redevelopment. This is followed by a number of questionnaires with a focus on quantifiable statistics such as size of residences and level of household incomes, as well as a number of interviews with households and local officials conducted during the research.

The study involved seven different districts that have experienced the Penghuqu redevelopment in Fushun city. The seven districts comprised of three major districts including Liu Streets, Mou Di and Dong An, and four minor districts including HuXi, Hudong, Wan Xin and Ci Valley. Among these districts, Mou Di was the first district that experienced redevelopment and all redevelopment and relocation efforts were completed in 2005, while Liu Streets was the latest district experiencing redevelopment and commenced in 2007. Followed by literature review on the topic, the background and procedures of the *Penghuqu* redevelopment project in Fushun city will be introduced. The influences of the *Penghuqu* redevelopment project on long-term sustainable improvements to the people, the communities and the districts will be then elaborated. Finally, we will present the discussions and conclusions.

PENGHUQU REDEVELOPMENT IN LITERATURE

Slum redevelopment project has been operating with a wide range from developed countries such as UK and US to developing countries such as India and Brazil since the end of Second World War. The common issue confronted by all slum redevelopment projects is the difficulty in providing involved people with sustainable changes of livelihoods. For example, a PPE of Slum Upgrading Projects in Tondo Foreshore in Manila in the mid-1970s' showed that the reblocking process was ef-

fective in rationalizing the physical environment in the short-term, but the project is on the verge of reverting back to its original state due to population pressure and lack of maintenance over time (Teresa, 1997). Koster and Nuijten, (2012) examined the performance of a Slum Upgrading Project in the city of Recife, Brazil, and contended that although the project partly achieved its promises, it failed to provide a better life for many slum dwellers because it did not consider their livelihoods. Sejal and Ritika (2014) assessed the impoverishment risks of slum resettlement projects in Indore, and their results indicated that the presence of significant loss in household assets, increased unemployment, loss of access to common services, increased health risks, marginalization and social disarticulation, all are negative effects combined into vulnerability and increased probability of falling deep into poverty.

Researchers have substantively discussed the factors that influence the consequences of slum redevelopment project. Cernea (1988) identified five factors including resettlement policy, legislation, pre-planning, public participation and adequate compensation, which significantly influence the success of formulation and implementation of resettlement project. UNCHS (1991) presented main factors contributing to successful relocation; it includes participation of members, physical development of the resettlement area, award of compensation, social development and consolidation of livelihood. A subsequent study taken by ABD highlighted community participations in each step of the project, compensation or funding of resettlement activities and socio-economic restoration activities. All these are key factors ensuring an effective relocation process (ABD, 1998). Vichai and Ranjith (2006) examined the factors influencing the post-relocation performance of slum relocation projects in Bangkok, including external factors to the community such as location of the new settlement and award of compensation, and internal factors to the community such as unity, availability of strong leadership, active participation and positive attitude of community members. Those factors listed above are beneficial in advancing the knowledge of slum resettlement project management and its effective implementation. However, a PPE should be regularly conducted when a slum resettlement project is over to inspect success of the project.

A number of different empirical methods have been carried out in PPE involving both qualitative methodologies based on primary or secondary sources, and quantitative approaches such as Randomized and Quasi-Experimental Methodologies. The focal areas evaluated in the past can be divided into three categories (Field and Kremer, 2005): (1) Direct program impact assessment analyses the success of physical implementation of the project and population access to project resources and infrastructure; (2) Socio-economic impact assessment measures the impact of slum upgrading project on both individual and community level outcomes, such as health and schooling attainment, employment, land and housing values, inequality and local economic development; (3) comprehensive impact assessment also considers indirect program effects at both individual and community level, such as migration, political

enfranchisement, social capital accumulation and the development of complementary infrastructure.

A vast number of publications have been directed towards the types and causes of low-income residential areas in urban China (Liu and Wu, 2006; Wu, 2004; Wang, 2005), the characteristics and effects of spatial distribution (Gu and Kestloot, 1997; Yuan, et al., 2009), and housing improvement model for under-privileged people (Wei, and Li, 2006; Li and Yang., 2012) by scholars from Chine and around the world, based on extensive social survey data and typical case analysis.

In existing case types, 'village in city' in those large cities such as Beijing, Shanghai and Shenzhen and elsewhere are the major areas in analysing low-income residential areas in urban China. Few scholars, however, have studied the massive *Penghuqu* redevelopment in old industrial cities in recent years. The few researches only focused on causes of the *Penghuqu*, its characteristics and influences, difficulties of the *Penghuqu* redevelopment and suggestions and the redevelopment experiences. None have evaluated the success of the *Penghuqu* redevelopment in old industrial cities. In this paper, we will conduct a Post-Project Evaluation of the *Penghuqu* redevelopment project in an old industrial city by employing a qualitative approach based on primary sources, and the impacts of the project will be evaluated at individual, community and district level.

PENGHUQU RESETTLEMENT IN FUSHUN

The city of Fushun is located in Liaoning province, Northeast China. With a population of approximately 2.2 million, Fushun is half an hour drive away from Shenyang, the capital city of Liaoning province. The city was an industrial powerhouse that fuelled China's economy. With abundant coal resources, the city's economy has highly relied on coal mining and its related industries, which provided the raw material indispensable for China's industrialization during the time of centrally planned economy. Now, Fushun is underdeveloped compared with large and developed cities like Shanghai and Beijing.

As a problem left over by the centrally planned economy in China, Fushun and its surrounding towns had substantial areas covered by *Penghuqu*, which used to be homes to workers of several SOE. Since the 1980s, as a consequence of the gradually exhausted coal resource in Fushun and the reform of national economic institution, those SOE suffered serious financial crisis and had collapsed during the economic reform in 1990s, which then led workers in these SOE unemployed and only few of them could find a new job. The unemployment not only made these workers unable to afford new accommodations or resettle in other regions against rapidly increasing housing price, but also deprived their abilities to improve or even maintain the poor conditions of their existing houses. The previous relatively affluent residential districts had become sprawling slums in the span of a few years. In 2003, a population

of 113,400 were living in low living standard in Fushun, which occupied 47.68% of people living in the *Penghuqu* (Ni, et al., 2012). The residents in the areas lacked access to basic facilities such as clean water and sanitation, with one toilet available to 790 households on average and 93% of the residents relied on coal for heating and cooking (Ni, et al., 2012). Poor living conditions in these areas made those workers, who were previously in high-class, discontent, and the *Penghuqu* had gradually evolved into the districts with the most chaotic social order.

Since the economic reform and the policy of opening up in China, some of the *Penghuqu* in central districts of the city had been reconstructed, but the redevelopment process was very slow and its results were not obvious due to restricting financial and other factors. Until the end of 2004, there were still 12 million square meters of *Penghuqu*, which occupied approximately 10% of the built up areas in the city of Fushun, and the number of the *Penghuqu* with areas of more than 10 thousand square meters reached up to 84. In 2004, Li Keqiang, the Communist Party Secretary of Liaoning Province, made an on-site inspection of the *Penghuqu* in Fushun by visiting various households and asking about residents' living conditions. He subsequently announced that the *Penghuqu* redevelopment project would be carried out in Fushun and its surrounding towns. Within five years, the city had demolished and redeveloped 3.18 million square meters of the *Penghuqu*, had built 4.635 million square meters of houses and had relocated 318,000 residents, which is about one fifth of the urban population.

THE PROCEDURE OF THE PENGHUQU RESETTLEMENT

Now the prime minister of China, Mr. Li Keqiang's success into this senior position was partly due to the successful and effective Penghuqu redevelopment projects in Fushun. The aims of the projects were to alleviate the hardship suffered by local residents, and to improve their living conditions. The houses in the Penghuqu were demolished and the residents were normally resettled in high-rise apartment near their old houses. In order to effectively advance the Penghuqu redevelopment, the projects were perceived as the "Number One Livelihood Project" by Liaoning province and success and efficiency of the redevelopment were deemed as important criteria to test administrative capacity of local officials in Fushun. The city took initiative to create "Green Channel" for the Penghuqu redevelopment projects primarily through centralized transaction, door-to-door service and an on-site office. These series of actions had significantly improved efficiency of the projects; those cases that often need half year to complete were responded to in only a few days. Therefore, the *Penghuqu* redevelopment projects, excluding the post-redevelopment efforts by local officials, were usually completed in between 6 months to 2 years after the initial announcement.

The projects included a number of different procedures. The first of them was fund procurement. Generally, local officials assisted and affected residents through the process of negotiation, relocation, construction and settling. Among these procedures, fund procurement was always the procedure that restricts the projects. In Fushun, the *Penghuqu* redevelopment project raised funds of 5.212 billion Yuan by a number of ways, such as loan, subsidies from national, provincial and municipal finances, residents' personal contribution, and policy inputs as well as investments from enterprises. Among them, China Development Bank loaned 2.818 billion Yuan, provincial finance provided 416 million Yuan, municipal finance offered 30 million Yuan, central government aided 541 million Yuan as a subsidy of infrastructure construction for the *Penghuqu* redevelopment in coal areas and also, residents contributed 1.407 billion Yuan. In addition, the government invested 2.4 billion Yuan through policy input, for example, free land transfer and reduced administrative charge.

Despite the fact that the *Penghuqu* in the city of Fushun were divided into several different districts, the redevelopment projects were conducted for one district at one time to minimize disruption, to look after welfare and displacement of affected residents and to better manage the financial burden of the whole projects. Once one district was scheduled for redevelopment, the project would be announced to affected residents first by posters, notice boards and public campaigns and speeches in the district. During this period, local officials would state benefits of the redevelopment and promote involved residents to sign agreement, which allows a smoother transition for next phase.

Local officials would then begin the process of negotiation, a short time after announcement of the redevelopment projects. Rather than forcibly evicting residents from their houses, local officials in Fushun would attempt to convince residents to voluntarily sign the redevelopment agreement through negotiation. Most residents were acceptable to the redevelopment, although some were unsatisfied and complained especially regarding the amount of compensation and the area of apartment relocated.

Once all involved residents had signed the redevelopment agreement, they would then be relocated temporarily. The relocation standard differs from district to district, as some officials provided temporary accommodations, while others offered monetary compensation so that these residents could look for their own houses.

The demolition and reconstruction of the *Penghuqu* usually lasted no more than 6 months to allow local residents to settle in their newly built apartment as soon as possible. For example, the first *Penghuqu* redevelopment project in Fushun was in Modigou. It took 5.5 months to build a new apartment and people moved in after 7.5 months after their old houses were demolished. The compensation standards were "demolishing one paying back one", which mean demolishing one square meter, paying back one square meter, and these would be for free. The increased areas would be paid according to construction cost, for example, it cost only 600 Yuan

per square meter for the increased areas within standard and the properties would belong to individuals.

After the completion of the *Penghuqu* redevelopment projects, local governments in Fushun had organized several training courses as well as job fairs to improve productive capacities of involved residents and to provide employment opportunities to them. These efforts would help them to obtain stable and better employments and allow the residents in the district to increase their living standards.

IMPACTS AT THE INDIVIDUAL LEVEL

There were several changes to the life of involved residents with the completion of the *Penghuqu* redevelopment project. The first noticeable change was that the population density in the district had been increased; the second was the change to general cleanliness, hygiene and tidiness of the district, and more free time for the residents as reported by them. Overall, there were significant improvements in human, physical and financial capitals of involved residents and these changes were directly attributed to the *Penghuqu* redevelopment projects.

The significant increase in capitals is one of the most obvious successes of the redevelopment projects. Before redevelopment, most of the residents lived in small and shabby houses with very low price. For example, a single unit may only be valued as 30,000 Yuan, whereas after the redevelopment, people moved into new and relatively more spacious apartments, which were more valuable, and priced 300,000 Yuan in the market. This substantial increase in assets in the form of their residence not only represents a resource that the residents can fall back on in times of difficulty, but can also allow them to utilize it as collateral when pursuing potential opportunities. The increase in capitals and the areas of the residences can be quantified by comparison with the value before the projects. As Figure 1 below shows, the average area of the residence has increased by an average of about 25-30 square meters to approximately 50 square meters. This represents a significant improvement in living space that these residents will not be able to afford by themselves.

As mentioned above, the *Penghuqu* redevelopment projects maximized free time that the residents could dominate and people reported that they enjoy this improvement as a direct and unintended consequence of the projects, which strongly increased human capital of individuals. When living in the *Penghuqu*, the residents had numerous daily chores, for example they had to collect coal for heating and cooking and spend time waiting for a long queue for public toilet in the morning. The new apartments provided by the redevelopment had not only provided an independent space for each household, but also it significantly reduced the amount of time spending on these daily chores, as central heating and gas systems were available in the new apartments. These amenities could then allow people to manage their time for further improving and sustaining their lives, such as different members in

the family looking for better employment opportunities and even starting a small business.

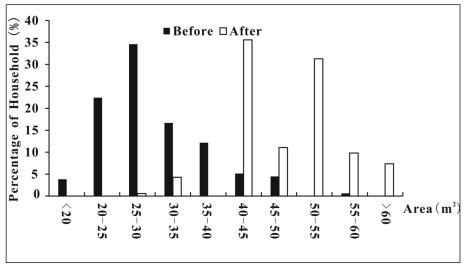


Figure 1: Household residential area before/after the Penghuqu redevelopment

In addition, local government in Fushun enhanced people's mobility by introducing public transport, for example, public bus that had been operated for cheap price within these areas and between these areas to other parts of the city. This supply of public transport together with more free time availability had resulted in an increase in income levels across these districts, although there was some other factor such as money from renting the new apartments that contributed to the income increase. Figure 2 below indicates the increase in income level from approximately 1327 Yuan to 2100 Yuan per month in 5 to 10 years after the redevelopment. It notes that even these increases are corresponding with China's phenomenal national growth rate. The increases in income levels in these districts are applicable to almost all the residents rather than only a few privileged individuals.

Over the course of fieldwork carried out, it was found that not only the expenditure for welfare assistance schemes had increased, but so too the number of residents on these schemes. According to the investigations, many residents had signed for the various schemes after completion of the *Penghuqu* redevelopment projects. The welfare assistance scheme in China is relatively complicated such that various schemes have different conditions suitable to different people on the basis of their needs. Before the redevelopment, only a few people had applied for welfare assistance due the long distance from their residences to the administrative center and complexity of the application process. However, after the redevelopment, the administrative center became closer, and local officials were able to make individual house visits

and could assist the residents in applying for the schemes they were eligible for. These schemes had contributed to the residents in various ways, such as increasing the sustainability of individuals or households affected.

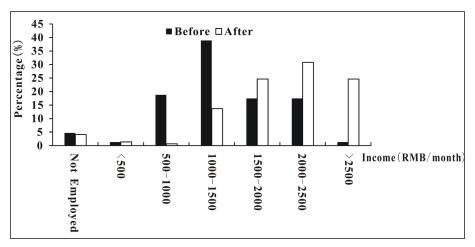


Figure 2: Per capita monthly income before/after the *Penghuqu* redevelopment

IMPACTS AT THE COMMUNITY LEVEL

The increased population density had increased economic activity of the regions, enticed many residents to start their own small business and also attracted a number of entrepreneurs from the city to invest in the districts. As a consequence, more competitiveness was created between the residents compared to their previous life in the small communities and with no opportunities for competition. Gestures of goodwill and selfless aiding had become common. But on the other hand, many residents also realized that these opportunities are determined by the ability of utilization and are missing them entirely. Many residents reported that they feel farer with their neighbors, who would be less likely to help each other compared to what they did before. People would not expect that they could count on their friends and neighbors for helps when they suffered difficulties. Considering the reliance of people on others for helps and information sharing when they were living in the *Penghuqu* with hard situations, the weakened social connections between people will adversely affect individuals' resilience against future crises.

IMPACTS AT THE DISTRICT LEVEL

The improvement in the layout of the district is another obvious consequence of the *Penghuqu* redevelopment projects. Due to the undisciplined *Penghuqu* expansion

before, these areas were crowded with less space between each house. It was usual that local residents build extra shacks or extensions to existing properties with no approval from any governmental department, which further congested the narrow space in the districts and restricted individuals' mobility. After the redevelopment, people have had wider space in the areas that allows ease of transport, which then makes it convenient for people to obtain more opportunities and better employment outside the districts, such as in the city center of Fushun.

But as time went on, factors that influence sustainable development in the districts have gradually appeared. Firstly, in the long-term the economic perspective in some districts has not improved or declined after the redevelopment. This was due to negligence of local officials and the designated function of the areas as residential. A similar redevelopment carried out in 1990s in Shenyang, a city near Fushun, had totally different stories. Local officials in Shenyang worked actively to encourage foreign investors to set up companies, shopping centers and departmental stores, which made the city of Shenyang more prosperous, with rapid economic growth, more jobs and an increase in housing prices. Such efforts were absent in the redevelopment in the Fushun where the redeveloped areas' economy were not activated, and more investments and constructions were concentrated on a new planned economic region between Shenyang and Fushun.

Secondly, many facilities installed in the redeveloped regions have fallen into disrepair and needed maintenances. This was unexpected because these facilities have only been used for less than a decade since completion of the Penghuqu redevelopment. One of the main reasons resulting in this condition is that the maintenance fees for these facilities are manipulated. The government announced at the beginning of the redevelopment projects that central finance would be allocated to each Penghuqu district in order to reduce the financial burden on the districts. Instead of making monthly contribution to the maintenance fees to the districts, the residents would make a one-time payment after completion of the redevelopment projects, and the funding would then be managed by local officials and the developers of the districts for maintenance purpose. Some developers, however, have seized a chance to seek private gains due to inadequate regulation. For example, some of them estimated that the fund can last for another 20 years, so they can use most of the funds, while some others speculated that the government regards the redevelopment projects as a short-term solution to alleviating poor living conditions of the residents and will reconstruct the areas again in the future. Disrepair of these facilities will become detrimental to sustainable development of the regions, especially if some facilities break down due to lack of maintenance over extended periods of time.

Finally, the increases in living conditions and sustainability have empowered local residents to leave the districts. Before the redevelopment, these people were stuck in the poverty cycle and were not able to move out from the districts, whereas with the redevelopment, they had financial and social resources that allowed them to settle in more lucrative places, such as the city center of Fushun or even other cities or

other provinces. Although most of the older residents stayed, many residents aged below 40 have taken the opportunities to move out for better life. As replacement of these people who left the districts, new migrants from rural areas have settled in the districts. These people are less resourceful and sustainable; the sustainability of the districts will eventually decline.

Lack of economic competitiveness in Fushun compared to large cities such as Shenyang and Shanghai, and the increase in mobility such as improvement of public transport have led a lot of young people to leave their homes. Figure 3 shows the demographic survey based on age in the *Penghuqu*. Although there are insufficient data prior to the redevelopment, Figure 3 clearly indicates that there are more aged people over 40 than young people. Assuming the survey data is representative of total population, it would be reasonable to conclude that much of the young generation has left the districts for better opportunities and employment, which rapidly reduces human capital in the districts.

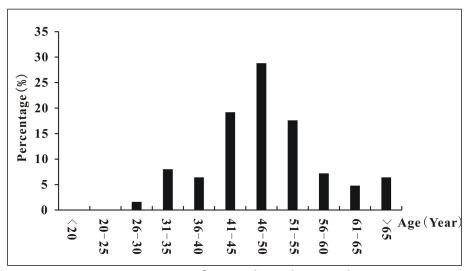


Figure 3: Age structure of surveyed population in the *Penghuqu*

DISCUSSION AND CONCLUSION

The *Penghuqu* redevelopment in Fushun is essentially an urban slum resettlement program that places people from previous dilapidated houses in newly built apartments. Different from previous urban resettlement induced by engineering construction, ecological protection and land development, the goals of the *Penghuqu* redevelopment in Fushun is to compensate and protect the interest of the lowest class lost during the economic reform in China, to improve the living standard of disadvantaged groups in the city, and to maintain social stability. The high efficiency

of the substantial *Penghuqu* redevelopment pursued within such short periods in Fushun has benefited from the powerful governments in China, creative financing as well as convenient services provided by relevant governmental departments. The advantages of rapid resource allocations by the government and high efficiency of the market operation in China contribute to the prospering *Penghuqu* redevelopment in Fushun, and also provide successful experiences, practices and models for similar *Penghuqu* redevelopment in other parts of the country.

The changes resulting from the *Penghuqu* redevelopment in Fushun have so far reflected an increase in living standard of the residents in the districts and an improvement on their layout, but the redevelopment has also weakened social connections among people within the communities by making them less reliable for others when suffering difficulties. Moreover, the increase in living standard has not promoted sustainable development of the newly built districts, and the living standard of the residents may fall again with the declines in sustainable development in the districts, requiring continuous attention. Rather than considering the redevelopment as partly successful, the *Penghuqu* redevelopment has been very successful in achieving its original goals of alleviating the residents' poor living conditions and providing them with better opportunities. It has also accomplishing some long-term improvements beyond the original goals, such as the substantial increase in assets, the improvement in residents' mobility and the increases in competitiveness between the residents.

However, even though the *Penghuqu* redevelopment in Fushun has significantly improved living standard of the residents, much remains to be done to sustain the development in the newly built districts. Firstly, combined with urban economic transformation, the governments should vigorously support the residents relocated in the *Penghuqu* for entrepreneurial activities, encourage developing labor-intensive enterprises, community services and family handicraft industries in the newly built districts and its surrounding areas. Secondly, the government should establish long-term post-project management mechanisms to ensure that the newly constructed districts and its infrastructures can obtain maintenance and improvement in time, and continue to carry out targeted employment trainings to improve people's ability of independent employment. Lastly, by considering that the less abled of the relocated residents pay for property management, the government could explore the management modes of self-governance and self-service by the relocated residents to ensure that the standard of the living environment of the newly constructed districts does not decline.

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