



**Delft University of Technology**

*A study of the urban village and its regeneration in China*

*- the case of urban villages in Harbin*

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Engineering and Policy Analysis

Faculty of Technology, Policy and Management

8/26/2019

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## Title Page

**Title**

A study of the urban village and its regeneration in China - the case of urban villages in Harbin

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## Acknowledgments

This is my master thesis of Engineering and Policy Analysis (EPA) of Faculty of Technology, Policy & Management (TPM), Delft University of Technology.

I want to express my appreciation to everyone who helps me with the thesis. Firstly, I want to show my gratitude to professor Martin de Jong, Doctor Thomas Hoppe, and professor Baiqing Sun. Their support gives me this chance to finish this thesis. Secondly, thanks to my family and friends. Your support and encouragement is my driving force. Thirdly, Thanks to all the students and teachers in the Engineering and Policy Analysis program. Meeting you and work together with you is such a happy experience, and I will remember it forever.

Thank you!

## Executive summary

Recently, with the rapid development of the economy in China, the process of urbanization is accelerating. However, in the fast urbanization process, the government's rapid expansion of the space has resulted in a large number of urban villages emerging. These urban villages locate inside the downtown area but the situation in there is different from the surrounding urban areas. These urban villages cause problems to the social security and community environment. The intelligent management and regeneration of urban village helps to optimize the urban land resources, improving urban appearance, and enhance the quality of life in villages and the city.

Harbin is one of the largest cities in China. Since the reform and open-up in the 1970s in China, Harbin has developed rapidly. With the rapid development of the economy and urbanization process, the problem of the urban village appears in Harbin. To understand the real situation of the urban villages in Harbin and how to mitigate the influence of their developing process, this thesis focuses on the research question below:

*How do the urban villages in Harbin and their regeneration influence the surrounding area and Harbin city?*

This research question is analyzed from the perspective of how the urban village influences the housing value, how the urban village influence of the government and people relationship, and how the government-people-relationship and housing value change related to each other during the urban village development process. To answer the research questions, a housing value model is built to analyze how the urban village influence the housing market in Harbin. Stakeholder analysis is used to understand the relationship between the government and people during the urban village development. And all these studies are carried based on the urban village develop model and considering the situation happens in each stage of the developing process. Based on the findings in the influence on the housing market and stakeholder involvement, how do the urban village and their regeneration effect the housing market, the city image, the community life is given.

Results from the analysis show that urban villages and their regeneration in Harbin have influences on the housing market in Harbin. Before regeneration, the closer houses are to the urban village, the cheaper they are. Urban villages with a low rental price also provide rental houses for low-income groups in the city. After regeneration, the regenerated urban village area provides housing land and housing supply. However, it does not have much impact on the housing market demand due to the low-income of the residents. Besides, the housing price in the regenerated village influences the average housing price in Harbin, and the number of selling houses in the regenerated village increases the total number of selling houses in Harbin.

The relationship of the key stakeholders during the whole urban village develop process analyzed. In the gestation stage, the relationship between government and residents is simple and weak. However, illegal activities happen in early-stage-villages because of the under-developed situation. In the formation stage, the relationship between several parties becomes more complicated. The main issue is the game between government and owners, which should be considered well in respect of compensation. In the development stage of the urban village,

the developers have to collaborate with the government and people. There could be the issue of forced eviction and demolition during the negotiation process between the developers and people. In the disappearance stage of the urban village, the relationship between government, developers, and residents becomes relatively simple. However, there are nail households left after the renovation of the urban village, which becomes a tough barrier for urban development.

Based on the research of how the urban village influences the housing market and stakeholder relationship, it shows that urban villages have a close relationship with the city image. Before regeneration, urban villages have problems of the dirty and chaotic living environment, poor social security condition, disorder housing construction, and low land use efficiency. People living in urban villages cannot guarantee basic survival and quality of life. After regeneration, urban villages will merge into the city in the form of a new community or business district, which is a benefit to the city image. Besides, the successful regeneration of urban villages in the city is always good news for the city, which is always highly concerned. Beside of the community environment, urban villages also affect the city image from the perspective of government and people relationship. During the regeneration, the relationship between government and people becomes complex. Especially when it comes into the compensation issues, if the government cannot deal with it properly, villagers are easily to be angry and upset about the government. This will have a terrible influence on the government image of the city. The transformation of urban villages must consider the survival and development of the indigenous people into the scope. The government needs to take care of the villagers to get essential survival protection after entering urban life. After leaving agricultural production and entering urban life, how they can get stable economic source. At the same time, the government needs to care for low-income groups living in urban villages, who are one of the main groups of the population. Without low-income housing, these people need another proper living area.

Considering the influences of the urban villages, recommendations about funding, compensation and floating population have been made.

- The ‘plan together exploit separately’ funding mode is suitable for Harbin urban village regeneration projects. This model is better to maintain the relationship between the government and people.
- Based on the government and people relationship analysis, the compensation to the villagers should be considered thoroughly to reduce the intense protest from villagers.
- The floating population plays an essential role in the urban village, which is in the urban area but has less cost of living. Their living situation including security and costing should be considered in the urban village management.

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# A study of the urban village and its regeneration in China

## - the case of urban villages in Harbin

### 1. Introduction

This chapter gives a clear storyline and overview of this research. Section 1.1 gives the motivation of this research and the relevant background information. Section 1.2 presents the core problem which this research is stated. Section 1.3 gives the research questions and how the problems will be investigated in this research.

#### 1.1 Background

Villages appear on both urban and rural areas in China. Villages in rural areas still keep the original inside and outside environment. The villages in the urban areas are surrounded by modern urban constructions. These villages in the urban areas are called urban villages. Urban villages give a unique way to show the urban governance, territorial politics, urban land regime in China.

With the rapid development of the urban economy, the urban land area continues to expand. Because of the city expanding, the villages surrounding the city are continuously included in the urban area. Under this kind of fast urbanization process, urban villages emerge. It is a space expansion policy that the city government is eager for rapid urbanization. In the mid-to-late 1990s, the urban suburbanization is accelerated, and the land in the urban fringe was heavily requisitioned. (Wang, 2009) The original rural settlements are surrounded by urban construction land, becoming a village in the city. Since the city government has to pay huge economic and social costs in urban village land compensation and village resettlement, the city government chose to "get rural land, bypass village residents and villagers" to reduce the budget. Geographically, these villages are in the city. However, due to the management policy, these villages still maintain their original economic structure and are not well integrated or unified with the city. This has laid a hidden danger for urban development. (Liu, He, Wu, & Webster, 2010)

Many western scholars have tried to apply the concepts of slums or shanties to the urban villages. In Dorothy Solinger's (1999) research the urban villages are described as shanties where Peasant migrants live, which is widely cited by many other western researchers. However, the Chinese urban villages are different from the slums in western or other developing countries. The rapid urbanization developing process and the particular Chinese policy background make the urban villages a unique phenomenon in China. Many research from western scholars focuses on the non-citizen identity of urban villagers. These urban villagers live in the city, but have large socioeconomic distance from the local urban residents. (David, 2016)

The mainland scholars started research on urban villages in China in the mid-1980s. They are fascinated by the special Chinese feature of this phenomenon, especially the ambiguous legal circumstance between village and city. (David, 2006) These urban villages cannot be covered by formal land management and regulation system for cities or villages. It is described as generally a low-rise, a densely-constructed building complex with scarce greenery that is out of tune with the surrounding urban environment. (Qing, 2002)

In order to have these urban villages, merge into the city effectively, the governments try to use sustainable regeneration approaches to redevelop these areas. From the 1980s, the massive scale urban renewal process begins to occur. (Hsing, 2010) Nowadays, the regeneration is not only about the construction rebuilding, but also taking into account the marginalized residents' lives transformation. There is also much research on the urban village renewal process. The urban village regeneration process is a complex process with multiple parties with different interests and power, and the dual system of property right over urban and rural land. (Ling, Jie, Xin, & Fan, 2014) However, most of the research are in the biggest cities in China, such as Shenzhen and Beijing. The studies of the urban village development process in middle-size cities should be taken more attention.

## 1.2 Problem statement

Urban villages have the problem of the dirty and chaotic living environment, poor social security condition, disorder housing construction, and low land use efficiency, etc. They have a bad influence on the image of the city and city development. And they also affect the normal life and practical interests of the citizens. Besides, urban villages located in the central area of the city but with low residential utilization rate waste the valuable land resources. The rational management and regeneration of urban village helps to optimize the urban land resources, improving urban appearance, and improve the quality of living in villages and the city.

Since the different management system of the city and the village, the urban village becomes an unclear middle ground. The dual ownership structure makes the urban villages harder to be well organized, which might influence the government and people relationship. Besides, the complexity of the urban village regeneration process with multiple parties is also a risk to the city image. The miss-communication or disputes during the regeneration process easily damage the trust between the government and people.

The existence of urban villages has become an obstacle to the development of China's cities to a certain extent, especially as a bottleneck for the development of small and medium-sized cities, which will affect the process of urbanization. This issue of urban villages is not only developed in China's big cities, such as Shenzhen and Beijing, consistency it has also emerged in medium-sized cities in China, and even some small cities that have developed rapidly are presenting this special thing. Therefore, we must pay sufficient attention to the urban village. Through the research and transformation of the villages in the city, promoting the development of urbanization and changing the industrial structure of the urban villages in the city, it is the development of urban villages that is more in line with the process of urbanization, and the promotion of urban management policies is more reasonable.

The urban villages have influences on the surrounding area and even the whole city, in social and economic aspects. They might hinder urban development and cause social problems. On the other hand, they might also drive the market economy.

The transformation of urban villages must consider the survival and development of the indigenous people into the scope. The government needs to take care of the villagers to get basic survival protection after entering urban life. After leaving agricultural production and entering urban life, how they can get a stable economic source. At the same time, the government needs to care for low-income groups living in urban villages, who are one of the main groups of the population. Without low-income housing, these people need another proper living area.

The study of urban villages help the urban planners and city managers have a better understanding of the urban development process, propose a clear direction of urban village reconstruction from the perspective of a livable city and sustainable urban development.

### 1.3 Research questions

In order to understand the real situation of the urban villages in Harbin and mitigate the influence of their developing process. The main research question of this thesis is:

*How do the urban villages in Harbin and their regeneration influence the surrounding area and the Harbin city?*

To answer the main research question, the research content is divided into three sub-questions. And each sub-research question will be answered based on a specific method or steps as explained below.

1. *How do the urban villages in Harbin and their regeneration influence the housing market in Harbin?*

This sub-question will be answered based on the housing value model. A simple housing value model will be built in this thesis. How different elements influence housing value (land rents) before and after and urban regeneration will be analyzed. The data is collected from the official website (Harbin urban and rural planning bureau and Harbin government, etc.) and the housing agency in Harbin (Harbin Housing and Urban-Rural Development Office, 2017; Harbin Bureau of Land and Resources, 2018). Besides, many scholars are working on the urban village housing value model (Fangtianxia, 2018; Song & Zenou, 2011; Shuang & Xin, 2009). Housing models and theories proposed in the previous articles are also used as a reference and comparison in this report.

2. *How do the urban villages and their regeneration in Harbin influence the relationship between the government and the people?*

This sub-question will be answered based on the desk research and multi-actor analysis. Many research about urban villages in China has been carried out, such as Shenzhen and Guangzhou. During the forming phase and the regeneration phase of the urban village, the confliction and collaboration between the government and the people always happen. As the urban village

regeneration involves varieties of stakeholders with different interest and power, the multi-actor analysis will be the main content for this part.

3. *How are the influences on housing value and involved stakeholders perspectives related to each other?*

Based on the findings of how the urban village influencing the housing value and stakeholder involvement. The relation between these two elements will be analyzed. In each urban village development stage, how the housing value and stakeholders' perspective related to each other will be analyzed. Based on the relationship, several suggestions about an integrated paradigm of social, environment and economic development will be proposed.

4. *How do the urban villages and their regeneration in Harbin influence the city image?*

In this thesis, the focus of the city image will be on city behavior and city vision. The city behavior is reflected from the perspective of the government and people relationship. Government carrying on urban village regeneration project gives positive input to the city behavior. The urban village regeneration not only helps the urban economic development, but also becomes an advertisement to show the developing of the city. City vision is influenced during the whole urban village development process. Before regeneration, urban villages damage the city vision because of the old bungalows and crowded streets. After regeneration, new-built green spaces or large central areas helps the city giving a better impression.

In this research, both the qualitative and quantitative methods will be applied. For the qualitative methods, the literature review and multi-stakeholder analysis will be used. About the quantitative methods, the data will be collected from the official websites of the Harbin government and the Urban regeneration in Harbin, database websites. In this research, the data sources and sample selection will be determined and different kinds of research models will be built. Based on the research model, the data will be processed.

This thesis consists of 8 chapters. It starts with the introduction of the whole study in chapter 1. This chapter also includes the background knowledge, research questions and research objectives. After the introduction, the theory chapter with a focus on the urban village, obstacles of urban village and city image, is presented in chapter 2. Following chapter 2, the methodologies used in this thesis, including stakeholder analysis and data analysis, are explained in chapter 3. In chapter 4, the urban village operation mode and regeneration projects of the urban villages in Harbin is presented. In chapter 5, how the urban village and urban village regeneration influence the housing market is analyzed. A housing value regeneration model is built to show the influence of the urban village on the surrounding areas. Then, the stakeholder relationship in the urban village development process is analyzed in chapter 6 to understand how is the stakeholder involvement in each urban village development stage. Based on the analysis in chapter 5 and chapter 6, chapter 7 presents the relationship between the perspectives of housing value and stakeholder involvement. Finally, chapter 8 provides the answers of the research questions, the recommendation for future improvements and the reflection of the limitations of the research.



## 2. Theory

### 2.1 Urban village

Urban village is a unique phenomenon caused by urbanization in China. The reason of the formation of these urban villages is the uncoordinated development of rural and urban region. It is a unique phenomenon that occurs during the process of rapid urbanization in China (Da, 2016). The appearance of the village in the city has generally undergone a transition from the original free village to a combined urban and rural area. In the end, as the city has further expanded, it has transformed into a typical village in the city, as shown in Figure 1. The urban village is a popular term in the process of the development of modern urbanization. It contains both the nature of the village and the nature of the city (Whitzman, 2010). Divided from the industries in which they are engaged in, urban villages have emerged in many urban-rural areas and have been transformed into a town mainly engaged in industry and commerce, and is a natural extension of the geographical expansion of cities (Li, 2002).



*Figure 1 urban village*

#### 2.1.1 Defining urban villages

The definition of an urban village is variously interpreted and applied worldwide. Many scholars focus on the migration aspect. Urban villages are in this case the villages within or close to the large cities which are filled with immigrants. This will be interpreted later in chapter 2.1.1.1.

Research on the urban villages in China comes a bit later than the other part of the world. In the beginning, some western scholars tried to relate the urban villages with the slums or shanties,

such as Dorothy Solinger (1999) and Mike Davis (2006). The mentioned 'shanties' in China, in the end, turns out to be the urban villages. (Da, 2016) In chapter 2.1.1.2, the relation and difference between urban villages in China and slums in other countries will be discussed.

#### 2.1.1.1 Urban villages for immigrants

There are studies about immigrants moving to other countries, for example, working-class Italians in an American urban area, who have adapted to the urban milieu, but there are still a number of Italian patterns of behavior survived (Mondello, 1960); the Germantown in Philadelphia keeping a rural environment within the urban environment (Foundation, 1980). The culture and living habits of the immigrants and the host city is different. As a result, the living area of these immigrants who still keep their living habit as villagers form a village in the city. Here we use the Filipinos in Canada as an example.

Large numbers of Filipinos moved away from their own country when the Philippines became a colony of the US. Cleto M. Buduhan (1972) did his research on the group of working-class Filipinos moved to Winnipeg, Manitoba in the 1970s. In his research, the living area of these Filipino immigrants is called an urban village, as they live in the urban city of Winnipeg but still living as villagers. The process of the formation of these Filipino workers are divided into four phases: (1) migrating from their home village to Winnipeg, (2) stabilizing in Winnipeg but also realizing their difference from the locals, (3) enmeshed in their original village value and behavior, (4) transplantation of familiar village values and culture items.

It is different from the urban villages in China. First of all, these urban villages are the living areas for immigrants from other countries, while the urban villagers in China are the living areas for local villagers. These local villagers even own the land. Secondly, the cultural and behavioral difference between the urban villagers and the local citizens is not as large as the difference between the immigrants and the local citizens. At least people in China still share traditional Chinese culture, value, and habits. Besides, the studies on immigrants living in these urban villages are more into how these immigrants see their presences. This type of reactivity in which individuals modify their behavior because of the awareness of being observed is called Hawthorne effect, which is an obstacle to penetrate deep into the urban villages (Da, 2016). This thesis also analyzes from the villager's point of view but not as the major content.

#### 2.1.1.2 Slums in the city

Some western scholars have tried to apply the concept of 'slums' and 'shanties' to the urban villages in China, such as Dorothy Solinger (1999) and Mike Davis (2006). The slums and shanties are dilapidated buildings and communities in Europe, Latin America, and some developing countries.

Around the 19<sup>th</sup> Century, the United Kingdom also had a large number of slums. Especially, the back-to-back house built by the land agent. These houses are built for low-income workers without sufficient ventilation or sanitation. (Wikipedia, Wikipedia, 2019) In Germany in the 19th century, the population grew rapidly, leading to difficulties in renting houses. Many people cannot rent a house and can only share one rental bed. In order to solve the housing problem, a large number of simple houses were built, which led to the generation of slums. (Jurgen, 1977)

In 2017, there are still about 16,000 people living in slums in France. These rough houses have serious safety and health problems. (local, 2017) (Horne, 1985).

There are studies about these slums in Latin America. With the population growth and housing value increase, finding an affordable, safe and decent housing has become a challenge for some people in Latin America. There are tens of millions of Latin Americans living in informal places and lacking basic social services. Some of these them can only live in slums in the city which are filled with social problems as crime and poverty. These people are referred to as urban poor in the book of Imparato and Jeff (2003).

However, the slums in western countries and the urban villages in China are different. The main difference is how the slums and the urban villages emerge. The slums in China are created after the city expanding. They are built inside of the city because of the lack of housing supply. The urban villages in China appear after the city expanding. They exist because of the rapid urbanism process in China.

Besides, the urban village is also used in urban planning in the UK, referred to as the well-designed, mix use and sustainable urban areas. (Bridget, 2002) Ebenezer Howard proposed the theory of "Garden city" meaning the rural belt surrounding the urban cities to improve the population healthy living and working condition. (Howard, 1968)

The village in China is different from the village in the British city. The British village is a residential area built to avoid the deteriorating urban environment. (Franklin, 2002) It has no close relationship with the surrounding countryside. It exists to create a certain rural environment. The urban village in China is formed during the process of urbanization and has a close relationship with the surrounding countryside. The composition of the population of the village in the city, the composition of the profession, the way people live, the quality of the people, etc., are different from the villages in the British cities. The forming of the rural villages in the British past is, to some extent, proactive and positive (while rural villages in China form passively). They are a means of dealing with counter-urbanization in the process of urbanization.

### 2.1.1.3 Urban villages in China

Different from the living area for the immigrants or the slums in the city, the urban village in China is a unique phenomenon in the process of urbanization in China.

Western "urban villages" and domestic urban villages are two different concepts: First, urban villages are immigrant communities. In urban villages, there are both immigrants and locals. It is a mixed community. Second, the village in the city is real. In villages, the original residents are farmers, and urban villages are harmonious and coordinated relationships between urban residents and villagers, urban residents and nature, and residents are generally high-income groups. (Zhang R. , 2007)

In China's urban villages and western slums, there are some similar problems, such as social crime, lack of infrastructure. In the form of expression, they are all mixed and crowded areas in the city; in terms of demographic characteristics, the slum population is often the migrant population in large cities or the people living in the city at the bottom, while some of the

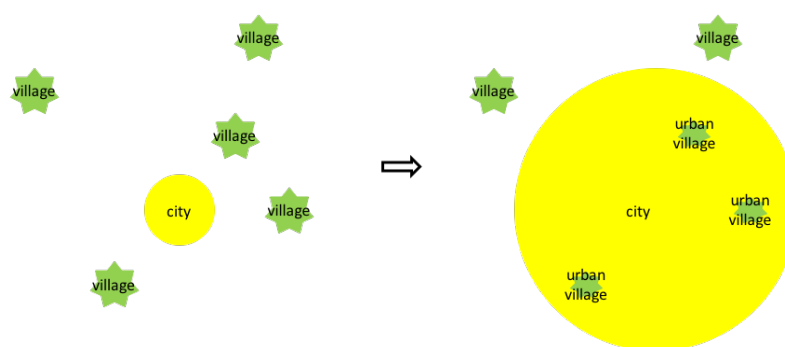
residents in the urban villages are Land formed under the dual structure. The World Bank pointed out that the reconstruction of slums is not a simple dismantlement, but to a certain extent, improve the living environment of residents, such as the improvement of infrastructure, improvement of healthcare conditions and so on (Imparato & Jeff, 2003). Although the formation of slums differs from that of China's urban villages, the experience of rebuilding slums can be used as a reference for urban renewal and is conducive to better reconstruction in urban villages. Western countries also involve the concept of urban fringe areas which refer to the landscape interface between town and country (Wikipedia, Rural-urban fringe, 2019). The emergence of this phenomenon is also close to the formation of urban villages. They are all products of the process of urbanization. Urban problems brought about by the spread of Western cities, such as low volume rate, high building density, etc., are similar to those in urban villages in China, and can also provide some experience for the reconstruction of urban villages in China. There are more and more studies in the village in the city. In the past two years, the articles of Cheng Zhongcun have been seen everywhere in newspapers, magazines, and papers. (Whitzman, 2010)

### 2.1.2 How urban villages in China formed

The formation of the urban village in China has several reasons. It is created under social, political and economic conditions of China. (Yue, 2018)

- The urban village is caused by city development and social conditions.

As the expanding of the city, some villages are included in the city area, as shown in Figure 2 below. These villages which are swallowed become narrow, but not absorbed. They exist in the urban area, but still, keep some characters in the village. Some urban villages are formed from the urban-rural fringe, which is the region between city and village. (Yang, Ma, Tan, & pin, 2017) Theses villages sit close to the city, hence are influenced by the social and economic factors of the city. They become urban-rural fringe at first. As the expanding of the city, they become urban villages gradually.



*Figure 1 villages swallowed up in the process of urbanization*

- Urban village is caused by political conditions.

The land management system in China is based on the urban-rural dual ownership structure. In the rural area, the public ownership of land, which is known as Zhaijidi in Chinese, is distributed to the peasants. (China Daily, 2018) Zhaijidi is owned by the village collective but

is used by individual households (Ma, 2015). The urban village development project is more intricate than normal urban land development project, because of the dual-land tenure system of the urban village (Fan, Ling-Hin, & Sue, 2018). Before regeneration, the rural collective owns the property rights of the land of the urban village, which is not allowed based on the urban land management principle.

- Urban village is caused by economic and cultural conditions.

As the high-speed development, large numbers of people who want to find a job crowded in the city. However, the value of land also increases with the economic development. These people with low income can not afford the high rent in downtown. The urban village, as a result, become a good choice for them to live in. As the peasants who use the land can rent their house to the public, the low-income groups are willing to live in the urban villages (Da, 2016).

### 2.1.3 Urban village category

According to the location and developing stage, the urban villages in China can be grouped in the potential urban village, early-stage urban village, developing urban village, and developed the urban village, as showed in Table 1. (Chen, 2004)

*Table 1 urban village category based on location and developing stage*

Category	Character
Potential urban village:	Villages in non-urban construction area
Early-stage urban village:	Village on the edge of the urban construction area
Developing urban village:	Village within the urban construction area, with vacant land
Developed urban village:	Village within the urban construction area, without vacant land

According to the ratio of land use in urban villages, the ratio of migrant population to indigenous residents in urban villages, and the percentage of income from property rental for indigenous people in urban villages, the urban villages in China are divided into three types: typical urban villages, transforming urban villages, urban villages on the edge, as shown in Table 2. (Wu, 2005)

*Table 2 urban village category based on land use*

Category	Ratio of construction land to total land use	Character
Typical urban villages	>70%	It is basically completely surrounded by cities; no agricultural production at all; property rental income accounts for more than 80% of their whole income; the

		ratio of migrant population to indigenous population is 4 to 10 times.
<b>Transforming urban villages</b>	30% - 70%	In the process of rapid urbanization; if it is not timely reformed and controlled, it will easily become a new typical urban village; property rental income accounts 50% to 80% of the main income of the local indigenous residents ; The proportion of residents is 1 to 4 times.
<b>Urban villages on the edge</b>	<30%	It still retains certain agricultural production; property rental income accounts less than 50% of collective economic income; the number of migrants is less than that of the indigenous population.

Urban villages in China can also be grouped in developing urban village and mature urban village. Developing urban villages still have construction land and the constructing is ongoing. These urban villages need planning guidance. Mature urban villages do not have construction land anymore. They need to be redeveloped, but the reforming process is difficult. (Jianming Gou, 2006)

#### 2.1.4 Urban village development stages

The development of urban village can be traced back to the formation of villages to a certain extent. The development of urban village has a certain periodicity. It is divided from the perspective of the development degree of Urban Village. Figure 3 shows the four phases of the development of the urban village, which is also called urban village life cycle. Based on the evolution process of the urban village, this development of urban village can also be divided into four stages: Gestation phase, formation phase, development phase and disappearance phase, as shown in the Figure 3.

As shown in Figure 3, this development process includes the gestation, the formation, the development and the disappearance of the urban village (Haiyun & Lijun, 2008).



*Figure 2 evolution of the urban villages*

### **The first stage: the gestation stage**

At this stage, the city has just begun to develop, but it has not yet expanded to villages and towns. It does not occupy the land of suburban villages. The vast rural areas are only simple rural settlements. The industry is mainly based on agriculture. Employment is mainly one or two industries, and there is no urbanization.

### **Second stage: formation stage**

At this stage, the economy is developing rapidly, the urbanization process is accelerating, and urban land is expanding. The agricultural land such as cultivated land, fish ponds and orchards in the suburban villages is gradually being requisitioned by the city, and the city's water supply, power supply, gas, roads and other infrastructure are continuously extended to the countryside. The villagers in the suburban villages began to focus on the secondary and tertiary industries, and began to change in the production structure and employment structure.

### **The third stage: the development stage**

At this phase, almost all of the cultivated land in suburban villages was collected by the city. The original farmland was replaced by new buildings, the village was surrounded by buildings, the farmers no longer farmed, but the status was still farmers, farmers rely on working and renting houses to obtain the main source of income, this stage of deterioration of public security,



roads and other transportation facilities Behind, the contradiction between urban civilization and the countryside is very prominent.

#### **The fourth stage: the stage of disappearance**

At this stage of the collapse of the urban village, from the perspective of living conditions, the original houses were gradually demolished, the high-rise buildings replaced the original houses, and the hukou, which is the household registration system in China, was changed from peasants to citizens. The quality of public security and road traffic construction took place. The villagers have gradually integrated into urban society economically and culturally.

As shown in Table 3, different types of urban villages have different locations, construction character, residence character, morphology, and agriculture condition. The Mature urban village locates in urban build-up area, surrounded by urban construction land with young age residence. Inner edge urban village locates on the edge of the built-up area in the urban planning district. In this area, construction quality varies a lot and most of them are low buildings. The residents in the inner edge urban village are half workers and half farmers. The edge urban village locates in the urban planning districts, but on edge. This area still keeps the rural style and maintain the origin village condition. Most of the residents in the edge urban village are farmers. The outer edge urban village is outside the urban planning district. This area still keeps the rural style and maintain the origin village condition. Most of the residents there are farmers.

#### [2.1.5 Urban villages in China and urban village regeneration](#)

The urban village is a relatively unique definition in China, while many countries in the world introduced regeneration initiatives. After the second world war, many nations met the issue of economic restructuring, social exclusion, and environmental degradation. In order to deal with these issues, the studies about regeneration were introduced. In recent years, the urban village renewal in China has also received a lot of attention. Compared to other countries in the world, urban regeneration in China is mostly caused by the fast urbanization process (Da, 2016).

There have been large numbers of studies to understand the urban villages and urban village regeneration in China from different perspectives. Scholars and government agree that the social and economic influence of the urban villages in China and their regeneration is important (Haiyun & Lijun, 2008; Song & Zenou, 2011). Studies for many cities in China have been carried out, such as Shenzhen (Zidong & Dang, 2003) and Wuhan (Shuang & Xin, 2009), but there is no study about the social and economic influence of the urban villages and their regeneration in Harbin.

In the urban village, the concept has not been directly involved in the process of urbanization in western countries. In the process of western urbanization, especially the developed countries, the characteristics of urbanization in developed countries are: early start, rapid development, and high level of urbanization and anti-urbanization phenomenon. (Biddulph, 2003) Therefore, more attention is paid to the reconstruction of cities, the slums of cities, and the settlement of peasants who have lost their land.





The village in the city is a unique phenomenon in the process of urbanization in China. Most scholars in China focus on urban economics, urbanization, urban planning, urban society, etc.



However, there is a lack of in-depth research on urban villages. Many researchers in China have described urban villages as “villages in cities.” In the later period of urbanization abroad, the urban environment has been deteriorating, and the urban population has moved in large numbers to the rural areas around the city, along with the infrastructure of the urban periphery. Constantly improve, especially the development of the transportation industry, to achieve a leapfrog improvement in the quality of human settlements. (Wang Yaping, 2009)

The study of the urban village is conducted from three perspectives: macro, meso, and micro. On the macro level: the target is studying the urban village to find the logic of urban development and change. From the perspective of Meso: a detailed analysis of the definition, causes, and transformation of the village in the city. There are even more microscopic aspects. Some focus on the economy of Urban village. Some focus on the institutional changes in the urban village. Some start from the problems of the village in the city; some pay attention to the land in the urban villages and some concern about the residents of the village in the city. The problem of urban villages can be seen from different perspectives. The strategies proposed by urban planning experts are more focused on the perspective of technology, while geographers, economists, and sociologists focus on the type of urban village, study the transformation model, and design the system (Jiliang Xue, 2012). It has a good reference for China's urbanization process and the transformation of the village in the city.

Table 3 different types of urban villages

Category	Urban-type		Rural type	
	Mature urban village	Inner edge urban village	Edge urban village	Outer edge urban village
<b>Location</b>	Located in urban build-up area, surrounded by urban construction land	Located on the edge of built-up area in the urban planning district	Located in the urban planning district, but on the edge; located on the edge of the ring road	Outside the urban planning district; large number of agriculture land surround the urban area
<b>Construction character</b>	Mainly on the lower floors; building forms are chaotic, mostly two or three stories; basic municipal facilities are seriously lacking; basic sunshine and fire protection cannot be satisfied.	Construction quality varies a lot; mostly low-rise buildings; not well organized; low environment quality;	Still keep the rural style; maintain the origin village condition	Still keep the rural style; maintain the origin village condition
<b>Residence character</b>	The residents' lifestyles are gradually approaching urban residents. In particular, young people are mostly well-educated and most of them have fully integrated into urban life. The original village residents are the mainstay and the population is more mobile.	Half workers, half farmers; there is still a rejection of urban life, mostly in old age and children; Some migrant workers rent apartments in this area	Most residents are farmers	Most residents are farmers
<b>Morphology</b>				
<b>Agriculture condition</b>	No agricultural land	Few farmland, which is the focused construction area in the near future	Farmers have farmland; city construction project may cover some of the agricultural land	Large amount farmland

The urban village is a term with great Chinese characteristics. In 1936, German geographer Louis first proposed the concept of the urban-rural transition zone. (Coleman, 1999) In 1968 Pleasant, according to Andrews's idea, clearly defined the "urban-urban fringe zone" (Pryor, 1968). The region covered by this concept has a certain degree of similarity with the urban village in China. The area covered by this concept is located between the continuous built-up area of the central city and the pure agricultural hinterland of non-agricultural land use. It also has the common characteristics of both urban and rural areas. From the perspective of population density, it is lower than the city center and higher than the rural region. In 1999, Zhang Jianming defined Urban village as "located on the fringe of urban and rural areas. On the one hand, it has certain characteristics of the city and enjoys some of the city's infrastructure and lifestyle. On the other hand, it also maintains certain rural landscapes and the small-scale farming economy. Rural communities with ideas and values" (Jiangming Zhang, 1999). Divided from the industries in which they are engaged in, "urban village" is a village that has emerged in many urban-rural areas and has been transformed into a town mainly engaged in industry and commerce, and is a natural extension of the geographical expansion of cities (Li P, 2002). Dividing the amount of land owned by peasants into "villages in urban areas" refers to the elimination of villages established in rural areas because the per capita arable land area is less than 0.1 mu after the large-scale rural collective land was acquired as state-owned land along with the development of social economy and urban construction. It is a special community widely distributed in urban and rural areas: First, the residents were formerly rural households, and they are now converted into urban households. The second is that the per capita cultivated land is less than 0.1 mu, and the land is no longer the means of production for people to rely on; Has been out of the scope of the original rural management as part of urban management"

Li Qing et al. (2002) believe that the village in the city is generally a low-rise densely-constructed building complex with scarce greenery that is out of tune with the surrounding urban environment. The concept of the village in the city was divided from the expression of the external environment of the village in the village and the difference between the village and the city in the town. Ignoring the population problem in the urban village. Liu Ji et al. (2003) considered that urban village was an environment in which villages used the intrinsic residential function forms due to various subjective and objective reasons, resulting in incomplete transformation. This concept analyzes the special living environment from the perspective of the birth of the village in the city and explains to a certain extent that the village in the city is produced subjectively. It is not an objective law of social development. Han Chaofeng (2004) believes that the definition of urban village refers to rural community where it is "in the city" but still implements rural collective ownership and rural management system. These concepts mainly analyze the particularity of the village in the city from the characteristics of residents.

Ding Hongjian and Xing Haifeng (2007) considered that Urban village means that in the process of rapid urbanization, the original residential area, and social relations were retained on the spot. They were still based on land attachments. The main source of life is a settlement based on primary relationships. Residents in this concept still use the land as attachments. The farmers in the villages in the towns here also have land, and the residents of the mature city villages have completely lost their land. Zhao Heng (2009) defines that the village of Urban

village, which was the original urban-rural junction, was gradually surrounded by the urban region. Newly built urban areas occupied most of the original village land, and the villagers did not engage in agricultural production. Also, retain the identity of the farmer. If we think of the village in the middle of the city from the perspective of agricultural production, some people also call the village in the city a rural area in the urban area, which is simply called urban and rural areas. Classified from the distribution of urban villages, the more common ones are the villages in the city and the suburbs.

In China, urban village first appeared in Shenzhen and other fast-growing cities in the middle and late nineties (Zidong & Dang, 2003), followed by China's ancient capital, Beijing. Nowadays, in many cities in China, there are urban villages (Da, 2016). The urban village also accompanies problems that are difficult to solve. The cause of the emergence of Urban village is the unique structure of urban-rural duality in China. The development status of the village in the city is "City not like the city, and the village is not like the village." Neither the definition of the city nor the concept of the village can be used to describe his characteristics. This is very complex. Regardless of whether it is from the land or the features of the residents, there is no clear boundary. It is a phenomenon that needs to be studied from multiple perspectives.

#### 2.1.6 Influence of urban villages and urban village regeneration

Several studies are carried out about the economic influence of the urban village. As the housing market is a popular topic in China in recent years, most of the research is about the influence of the urban village on the estate market. Yan Song and Yves Zenou (2012) developed a hedonic housing price model investigating how the housing value is influenced by the urban village. Both positive and negative effects of the urban village are found out in this study. Shaung Chen and Xin Tong (2009) published their study about urban villages in Wuhan. Their study focuses on how the urban village influences the estate market. The Hanyang district in Wuhan is used as an example, discussing the impact from the perspective of supply, demand and price. However, none of the studies analyze the influence of urban village before and after the regeneration.

There are large numbers of studies discussed the stakeholder relationship in urban village development using game theory (Changwei, 2010; Shifeng, 2020; Zhigui, 2006; Zhang & Zhao, 2006; Xin, 2010). Changwei (2010) conducted master thesis about the game relationship between government, developers, and villagers, using the cases of urban villages in Guangzhou, Zhuhai, and Shenzhen. The results showed that the urban village transformation is a 'games, harmony and won together' process. The social phenomenon caused by this is also pointed out. Shifeng Qiu (2010) proposed his study of social issues in urban villages, using the case of Mizhou. He used a game model to analyze the social issues during the urban village regeneration. However, most of the studies focus on the social influences which happen during the regeneration process, rather than the influences which happen during the whole urban village developing process.

China is a large country. The difference between developed cities and underdeveloped cities, from capital cities and non-capital cities, are huge. No unified theory or situation could apply to all the cities in China (Da, 2016; Jianming Gou, 2006; Ling, Jie, Xin, & Fan, 2014).

## 2.2 Urban villages hinder urban development

Tian Li (1999) pointed out that the village in the city affects the urban planning's implementation and hinders urban developing. The coming along problems include road congestion, lack of public vegetation, and inadequate construction planning. There are also various problems including accidents and fire hazards. Therefore, from the government to the local in society, the villages in the city are regarded as the areas where "urban diseases" are clustered. (Yuan R. , 2016)

There are many floating populations living in the urban villages. It creates difficulties to maintain the community security. The crime rate in the urban villages is also higher than the normal urban area. The villages in the city have been regarded by many as a place of filth and a high incidence of cases (Yongliang, 2011). In Guangzhou, 60% of criminals are hiding in urban villages (Yuan Z. , Guangzhou temporary living situation, 2007); in Taiyuan, 80% of the floating population crime members live in urban-rural integration (Ruiqi, 2006); in Kunming, the criminal incidence rate of Chengzhong Village in 2004 accounted for the city. 80% (Meng, Jiao, & Xiutong, 2008); According to the statistics of Suzhou Canglang Public Security Bureau, 90% of the criminals handled in recent years live in Chengzhong Village (Yuan Z. , How to overcome the obstacle in urban village regeneration, 2006). In Guangzhou and Shenzhen, criminal activities related to urban villages account for 60-90% of crimes in the entire city (Zhigui, 2006). Of the 6,345 suspects captured by the Baoan Branch of the Shenzhen Public Security Bureau in 2003, the temporary population accounted for 98.7% (Zi, 2004). The criminal rate in Harbin is not found, but the evidence from the other cities could show the situation in urban villages.

## 2.3 City image

According to Kevin Lynch (1960) written in his book image of the city, a well-formed city has a high dependence on the elements because it makes the city easily recognizable. The content of the city can be classified into five elements:

- Path. Paths are streets, canals that are channels along which the viewers move.
- Edges. Edges are the boundaries between two areas. Edges can also be linear elements in the city.
- Districts. Districts are sections in the city. Most people structure their city in this way.
- Nodes. Nodes are strategic spots in the city. The viewers can enter or travel into.
- Landmarks. Landmarks are external elements that the viewers can not enter into. They are more often a simply defined physical object.

Nowadays, the city image not only refers to the natural geographical environment or building landscape of a city, but also refers to the city's social and economic level, education status, and other public facilities, legal system, cultural traditions and citizens, etc. Factors such as values, quality of life, and behavioral methods act on the public and make the public's impression of the perception of a city. (Baidu, 2018)

The image of the city, in general, is the impression and feeling of the city (or a specific area) (Guangbin, Wang, & Wang, 2006). However, there are too many things that can make people feel and feel about the city. Buildings, roads, transportation, storefronts, tourist attractions, living facilities, etc. are all essential elements of this impression and feeling. The behavior of the citizens, the style of public office, the cultural atmosphere, the customs of the local customs, etc., are the most crucial contents of the image of the city that forms the characteristics of surplus. Even a dialect, a snack, or a set of costumes may constitute a long-lasting imprint of the image of the city. In this sense, the image of the city involves a new field that is both interconnected and relatively independent of our current urban planning, urban management, and urban construction (Lynch, 1960).

The city image is composed of three important parts: urban economy, urban living environment and urban culture. (Guangbin, Wang, & Wang, 2006)

According to the basic concepts of urban concept, urban behavior and urban vision, we understand and recognize the image of the city, grasp the law of the evolution of the city image, understand the interaction between the city image and the economic and social development of the city, and continuously improve the vitality and charm of urban development (Changchun & Zhicheng, 1998).

### **The concept of city**

The city's unique values, development goals, urban planning, cultural connotations, etc., are the core of the city's "brain" and city image (Lynch, 1960). The city concept integrates cultural image, urban orientation, social and economic development, etc., communicates and condenses the ideological understanding of urban residents, influences the value orientation of urban behavior, and stimulates the public to be aggressive. The main manifestations of the city concept include urban nature, development strategy and planning, urban culture, urban spirit and so on. The nature of the city reflects the historical orientation and requirements of the city, and constitutes the basic content and starting point of the city concept; the urban development strategy is embodied in the development policy and guiding ideology of different periods; the urban culture refers to the continuation of the history of urban development, the inheritance of the context and the spirit of the citizens, etc. The city concept is highly summarized and sublimated into a city spirit (Changchun & Zhicheng, 1998).

### **City behavior**

City behavior refers to various activity in the city which occurs unceasingly (Liu & Chen, 2007). The behavioral performance and important characteristics based on the recognition of the city's concept are the "doing things" of the city. It is the basic impression of what the city has done, what it is doing and what it will do. It is mainly represented by the organization management and activities within the city. For example, activities related to economic growth, social development, scientific and technological progress, government policies, cultural propaganda, physical fitness, environmental protection, etc., especially advertisements, propaganda, expo, sports events, etc., which are conducive to highlighting the image of the city, make the public even more generate identified activities. Internal management of the group, individual organization, education, improvement of investment soft and hard environment, living

environment, and quality service activities provided by the environment are internal behavior identification; external publicity, advertising activities, investment promotion activities, public welfare activities, public relations. Activities such as activities that face the outside of the city identify external behaviors (Changchun & Zhicheng, 1998).

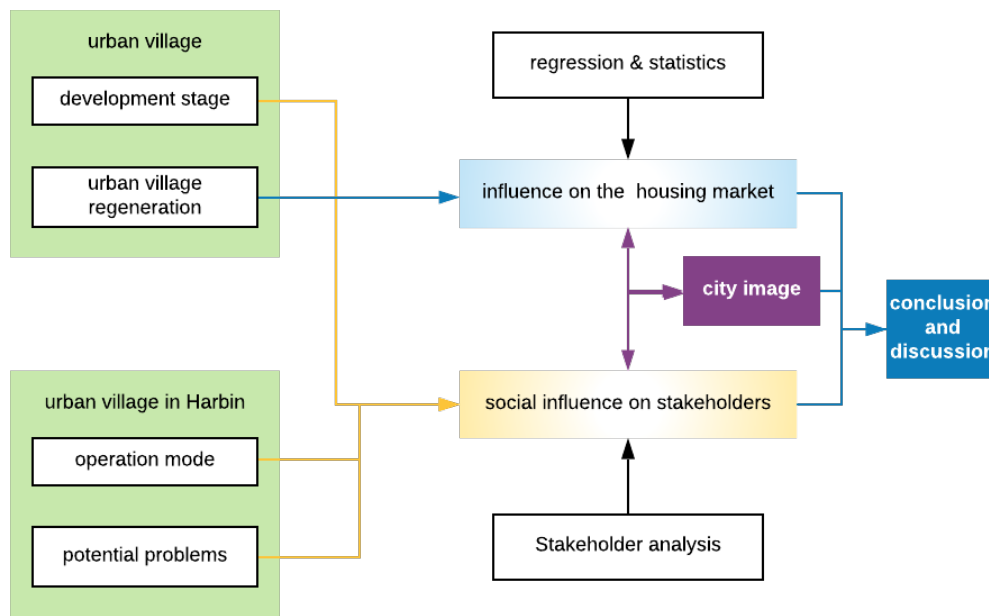
### **City vision**

The external performance of the city is the most direct and tangible reflection of the image of the city (Changchun & Zhicheng, 1998). The “shape, face and temperament” of the city, the difference between a city and a city. There are many things that can make people have urban visual effects, including city emblems, city flowers, city flags, mascots, city nicknames, public instruction systems, traffic signs, distinctive tourist spots, buildings, and green spaces. It is necessary to express the urban concept and the urban spirit through slogans, slogans, patterns, colors, etc. so that people can make a systematic impression of the city. The formation of the urban visual identity is often based on the historical culture of the city, based on the concept recognition of the city, and based on the behavioral recognition of the city, directly and quickly conveys the city's characteristic information to the public.

In this thesis, the focus is on city behavior and city vision. Government carrying on urban village regeneration project gives positive input to the city behavior. The urban village regeneration does not only help the urban economic development, but also an advertisement to show the developing of the city. City vision is influenced during the whole urban village development process. Before regeneration, urban villages damage the city vision because of the old bungalows and crowded streets. After regeneration, new-built green spaces or large central areas helps the city giving a better impression.

## **2.4 Analytical framework and research flow**

Figure 4 shows the analytical framework and research flow of this thesis. This framework can be divided into four parts. The first part is the research background, including the study of the urban village and the urban village in Harbin. The urban village study part includes the urban village development stage and the general information of the urban village regeneration. The urban village in Harbin part introduces the city Harbin, the urban village operation mode in Harbin and the potential problems in these urban villages. Some of the studies for the urban village in Harbin are based on the Hada village, which is one of the biggest and fully regenerated urban villages in Harbin. The second part of this framework is the stakeholder analysis and the regression & statistics. These are the methods used to analyze the influence of the urban villages in Harbin and their regeneration. The third part is the economic influence (influence on the housing market), the social influence of the urban villages in Harbin. The reason why the housing market is used as the economic aspect in this research is that housing value is one of the most representative economic element for urban development and its wide popularity. Then the economic and social influences are related together. In the end, based on all the analysis, conclusions and discussions are given.



*Figure 3 analytical framework and research flow diagram*

The influence of the urban villages in Harbin and their regeneration on the housing market is studied based on the regression model, basic data statistics which will be discussed in chapter 5 and urban village regeneration background information. Some of the studies are based on the data of the Hada village in Harbin. The social influence of the urban villages in Harbin is analyzed based on the urban village development stages. Stakeholder analysis is used to understand the collaboration between government, operators and villagers. Besides, several social phenomena, such as nail household and population relocation happen in different stages are pointed out and discussed. Based on the findings in housing value and government-people relationship, how these two aspects are related to each other is analyzed. In the end, conclusion and suggestions are given based on the above analysis. Based on the analysis of urban village regeneration process and stakeholder analysis, how the city image influenced by the urban villages are also elaborated from the perspective of city vision and city behavior.



### 3. Research design and methodology

This chapter delineates the approaches that are used to answer the research questions. As advocated by the Andrew Dainty (2008), this study uses multiple research methods and types of data to study the urban village phenomenon in China.

In the introduction chapter, three research questions regarding the housing value, government people relationship have been identified and formulated. In order to answer the research questions, the theory of urban village, city image etc. are given. Based on these theories mentioned in chapter 2, this chapter elaborate the methods of case study, stakeholder analysis, data analysis, data collection, and type of data used. The method of stakeholder analysis is for analyzing the government and people relationship during the urban village development process, while the method of data analysis is for analyzing the housing value. Both analysis is complemented with the method of case study.

#### 3.1 Selection of case studies

In this part, the boundary of the selected case is defined. The selected case is essential for the whole research. A precise definition helps to understand the scope of the study. Furthermore, as this case will be analyzed qualitatively and quantitatively, to help understand the research question, the selected information and data is limited based on specific criteria.

**Location** This thesis is focused on the urban villages in the Harbin city. As shown in the official report from the Harbin government website, there are nine districts in Harbin, which are Daoli district, Daowai district, Nangang district, Pingfang district, Xiangfang district, Songbei district, Acheng district, Shaungcheng district, and Hulan district. Five of these districts are included in this study, which are Daoli district, Daowai district, Nangang district, Pingfang district, Xiangfang district. The selective standard is based on the report from the Harbin Urban and rural planning bureau (Harbin Bureau of Land and Resources, 2018). These five districts are the fastest-growing urban areas in Harbin in the past ten years, and they are also the areas where Harbin's urban villages have undergone significant transformation.

**Size** Urban village defines roughly an area size that bigger than single buildings but smaller than one city. And the urban village regeneration size defines an area that is based on one village. The regeneration scale in Harbin could be set as 'middle scale', as it is not as large as the scale in Shenzhen and Beijing, but it is still bigger than smaller cities in China.

**Actor Involvement** For the urban village and regeneration project, one of the most important factors is the actor in this project. This research will involve the actor including the government, the developers and villagers, etc.

**Time** The timeline of this research is from 2000 until 2018. For the housing value part, the data is collected from 2005 until 2018. For the social element, the collected information can be traced to 2000. In this research, there are few direct contacts with the party as the difficulty of the contacting, which is carried from 2016 to 2018. Other acquired information is collected from old news and official documents.

### 3.2 Stakeholder analysis

Urban village is considered by the government and developers as the most critical area for urban land development and utilization. In the urban village development process, there are many contradictions in the existence of interests in the village. The contradictions and conflicts in the village are complex and changeable. These contradictions and conflicts have an influence on the relationship between the government and people. They also cause some community behavior, such as population migration, some social issues, such as nail households, and some social conflicts. The opinions from different stakeholders, including government officials, NPC deputy, experts and scholars, villagers, stock company, and tenant and operators are collected from the newspaper and forum (people.cn, 2018; Leju, 2018; Harbin tieba, 2018). The responsibility, power, and interests of these roles can be seen based on their views. The collected views can be found in Appendix I.

Stakeholder analysis is an approach to understand their resources to influence the decision making process. (Varvasovszky & Brugha, 2000) Stakeholders are people, groups, and units that are highly likely to be affected by an intervention (negative or positive) in the agreement or that will change the outcome of the project. Stakeholders' interests may be influenced because of project execution. Stakeholder analysis has become a popular analytical tool in the development field. This concept and analysis method is of great significance in solving conflict management problems (Li T, 1998). Stakeholders can influence the organization's progress, so their opinions must be carefully considered when making decisions. However, because the stakeholders' knowledge, lifestyle and surrounding people are different in level, the stakeholders have different views on the issues, and some of them may have more influence than others. How to balance the interests of all parties is a key issue to be considered when formulating the plan.

In the process of urban village reconstruction, there are multiple interest groups, which is also the key to conflict (Guikai & Junwei, 2009), as shown in Table 5. The difficulty in the development and transformation of urban villages lies in the balance of interests between the villagers, the government and the city developers.

*Table 5 the stakeholder analysis of rebuilding the villages inside the city*

Stakeholders	Goals, problem perceptions, interests and access to resources
<b>Government</b>	The initiators of the transformation of the village in the city are also the biggest beneficiaries of the transformation of the village in the city. They provide the government with a portion of the scarcity of land in the city. By improving the urban environment, the prestige of the government can be enhanced.
<b>Villagers</b>	Their interest directly related to the regeneration; not only relates to their housing, homestead and other issues, but also relates to their source of life before and after their transformation.

<b>Developers</b>	The urban village transformation requires a large amount of funds. Except for several wealthy villages, most of them need to be completed with the help of developers, which will bring them business opportunities and substantial profits (Xin, 2010).
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In this thesis, no stakeholder interview is carried out, because of the limited resources. There is limited opportunity for the author to get in contact with the villagers and the relevant government departments.

### 3.3 Data collection

The government and people relationship during the whole urban village development process is analyzed based on the stakeholder analysis. During this process, relative text documents are collected to understand actors' opinions, perspectives, objectives and outcomes. The official government websites, the voice of the villagers from the form are collected. In total, there are 36 actors' opinion involved.

The collected data in section 4.2 is the housing value in Harbin and the distance from the house to the closest urban village. The housing value is the dependent variable, while the distance to the closest urban village is the independent variable. The housing value data is collected from housing agencies in five main districts in Harbin (Daoli district, Daowai district, Nangang district, Xiangfang district, and Pingfang district) on June 2018. The distance from each house to the closest urban village is measured on the Harbin map. And the distance data is kept with one valid number, as the distance is hard to measure on the map.

The data used in this thesis is collected from the China housing market (China Real Estate Association, 2018), Harbin well-living website (2018), the Souhu concentration (Miao, 2017), the PC housing (2017), and the Harbin housing market report (2016).

The sample size is 160 in this research. As shown in Figure 5, the houses are selected from the Daoli district, Daowai district, Xiangfang district, and Nangang district.

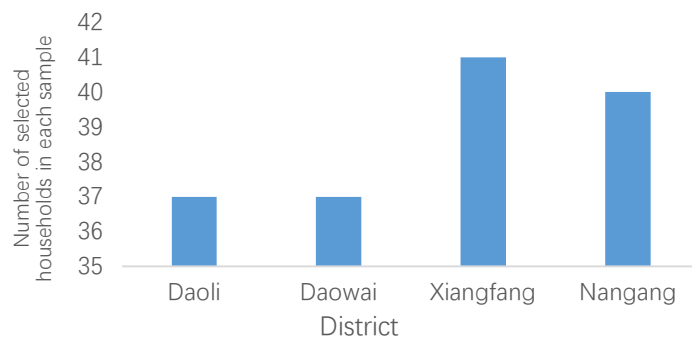


Figure 4 sample size in different districts in Harbin

### 3.4 Data analysis

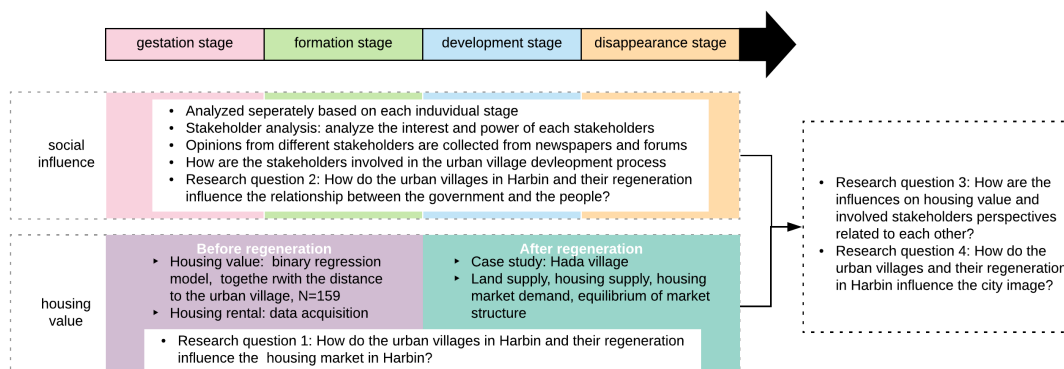
The housing value fluctuation during the urban village process will be analyzed based on data collection and modelling, which is a quantitative approach with multiple variables. Statistical analysis and multiple regression methods are used to analyze how the housing value is influenced by the surrounding urban villages.

The numeric dependent variable (housing value of different districts in Harbin) will be predicted and explained by the values of multiple independent variables (distance to the closest urban village, number of urban villages within 10km around, size, etc.). After evaluating the bivariate relation between the dependent variable and each independent variable, the independent variables significantly influencing satisfaction in winter is included in the regression analysis.

Based on the data gathered from the survey research, statistical analysis is conducted to test the statistical relation between the dependent variable and independent variables. At first, the original data is refined and processed by removing the implausible and inaccurate values and reforming the format of certain variables. Secondly, statistical tests are applied to check the representativeness of sample data, to ensure the conclusions drawn from the sample set are applied to the population. Thirdly, the bivariate relation between the dependent variable and each independent variable is checked. In this process, different bivariate relation tests are applied based on the level of measurement and other conditions. A binary regression model is build to illustrate the relationship between housing value and the distance to the closest urban village. Data were analyzed using SPSS for Windows version 22.0 (IBM Corp, 2013).

### 3.5 Methodological framework

The methodological framework is as shown in Figure 6 below. At first, the current situation of the Harbin urban villages and their regeneration is explained based on the information collection. Then, the influence of the urban villages in Harbin their regeneration on the housing market in Harbin is discussed. In this part, a simple regression model of urban village housing value is built. After that, the social influence of the urban village and urban village regeneration in Harbin is analyzed based on the collaborative approach. In the end, the conclusion and recommendations are given based on the discussions before.



*Figure 5 methodology framework in this report*

- Data analysis and regression model

The urban village housing data is collected from the Harbin Bureau of Land and Resources, and housing agencies. A binary regression model is built to illustrate the relationship between housing value and the distance to the closest urban village. The data cleaning, correlation test, and regression are carried out in SPSS for Windows version 22.0 (IBM Corp, 2013). Before data cleaning, the sample size is 163 households, while after data cleaning, the sample size is 159 households.

- Data analysis and correlation analysis

The housing data after urban village regeneration is collected from the Harbin Bureau of Land and Resources, and housing agencies. The case of Harbin Hada village is discussed in this part. The Pearson correlation between housing value and a number of commercial houses before and after urban village regeneration is tested. And the housing value in and near urban villages is analyzed based on time.

- Stakeholder analysis

In each stage of the urban village development process, several main stakeholders are pointed out. The power that they have an influence on and the interest that they care about each stakeholder are discussed. The key to the smooth urban village developing in the city is the balance of interests of the main parties.

The opinions from different stakeholders, including government officials, NPC deputy, experts and scholars, villagers, stock company, and tenant and operators are collected from the newspaper and forum (people.cn, 2018; leju, 2018; Harbin tieba, 2018). The responsibility, power, and interests of these roles can be seen based on their views. The collected views can be found in appendix I. Based on the stakeholder's statement, their interest during the urban village development can be observed.

## 4. Urban villages in Harbin

### 4.1 Harbin

Harbin is the capital of Heilongjiang province. It is the economic, political and cultural center of the northeast area in China. Located in the central place of Northeast Asia, Harbin owns rich resources and have developed an important material basis for industry. The development of industry drives the rapid development of the city. Therefore, the process of urbanization is also rapidly developing (Harbin Bureau of Land and Resources, 2018).

As shown in Figure 7 and Figure 8 below, Harbin located in the north of China, south of the Heilongjiang province. It sits in the northeast plain, which is between Great Khingan, Lesser Khingan mountains, and Changbai mountains. It also sits in the Songnen plain, which is formed by Songhua river and Nen river (China Highlights, 2018).



Figure 6 Harbin location (China Highlights, 2018)



Figure 7 Harbin in Heilongjiang province (China Highlights, 2018)

Harbin is a transportation hub with different kind of traffic extending to different directions. Important transportation modes such as railways, highways, and water transportation are distributed in Harbin. The main railways are Harbin, Bintang, Binzhou, and Rabin. Harbin's waterways cover the Heilongjiang, Songhua, Wusuli, and Nenjiang rivers. In the north, there are the Xiaoxingan Mountains, with the Songhua River in the middle, the Songhua River flowing from the southwest to the northeast, and Harbin being divided into Jiangnan and Jiangbei.

Harbin is an ideal location for agricultural development. Cultivated land is an important guarantee for the development of agriculture here. 90% of the land in Harbin is the so-called 'black earth', which is famous for cultivating organic food and textile-related crops (Harbin Bureau of Land and Resources, 2018).

## 4.2 Urban villages in Harbin

In the process of urbanization, industry, economy, and agriculture is influenced. As the specific situation in Harbin, the examples from other cities cannot be easily duplicated. For the farmland redevelopment, urban land use should use as little fertile black soil as possible, and it should start from the perspective of less farmland. Harbin is an important industrial city in northeastern China. With the development of the economy, the scale of the city is constantly expanding. The city is in the middle of the countryside and the city is slowly entering the rural areas. The rural area is gradually narrowing and even being surrounded. City village, therefore, in the process of urban construction, it is necessary to proceed from the actual situation on the ground, use the land with the highest efficiency, and try to protect the cultivated land. With the development of the north bank of the Songhua River, urban village includes Jiangnan and Jiangbei. The environmental problems in the urban village in Jiangnan region are more serious and it is difficult to solve it (Chun, 2012). The main survey area in this thesis is located in Nangang District, which is located in the southern part of Nangang District and is close to the main transportation point of Hanan Station.

### **Current urban village situation in Harbin**

In this research, five districts in Harbin will be involved, including Xiangfang district, Nangang district, Daoli district, Daowai district, and Pingfang district. The location of these five districts is as shown in Figure 9.



*Figure 8 location of the five districts in Harbin*

According to the Harbin City Planning Bureau's relevant data on Harbin Urban Village, there are 26 urban villages in Xiangfang District: Angle Village, Chaoyang Village, Dengjia Village, Mujia Village, Xingfu Village, Hongxing Village, Fumin Village, Venus Village, and Park, Art Village, Pingshun Village, Pioneer Village, Qianjin Village, Xinfu Village, Dongsheng Village; Hongsheng Village, Xinyi Village, Caojia Village, Heping Village, Yanjia Village, Xinxiangfang Village, Zhenxing Village, Xingfu Village, Democratic Village, Beibei Village, Xincheng Village. There are 6 city villages in the cottage area: Dongfu Village, Hanxi Village, Xinhua Village, Pingle Village, Gaochao Village, and Hanjiadian Village; there are 20 in Nangang District: Huaxin Company, Dingxin Industrial Company, Wangjiadian Village, and Evolution Village. Yongji Village, Lalin Village, Xinjian Company, Yanxing Village, Fanshen Village, Hongqi Village, Yonghong Village, Xingli Village, Jianshan Village, Fangshen Village, Satellite Village, Zhenxing Village, Hada Village, Hongxing Village, Yongfeng Village, Xincheng Village; Daoli District has 14 urban villages: Shengli Village, Jianguo Village, Dongming Village, Chengxi Village, Jinshan Village, Wuxing Village, Songjiang Village, Chengxi Village, Democratic Village, Youyi Village, Xingfu Village, Liangcao Village, Xinxing Village There are 13 city villages in Daowai District: Liansheng Village, Dongguang Village, Dongxin Village, Hengxing Village, Hongguang Village, Fengxiang Fruit Industry Company, Qianjin Industrial Company, and Heping Industry. The location of these urban villages is shown in Figure 10. During the renovation of Harbin's Urban village, the Xiangfang District accounted for the largest proportion, and the bungalow area accounted for the smallest proportion. The reconstruction of Harbin Zhongzhongcun is mainly concentrated in Xiangfang District and Nangang District, and the main areas of transformation (Harbin



Housing and Urban-Rural Development Office, 2017; Harbin Bureau of Land and Resources, 2018).

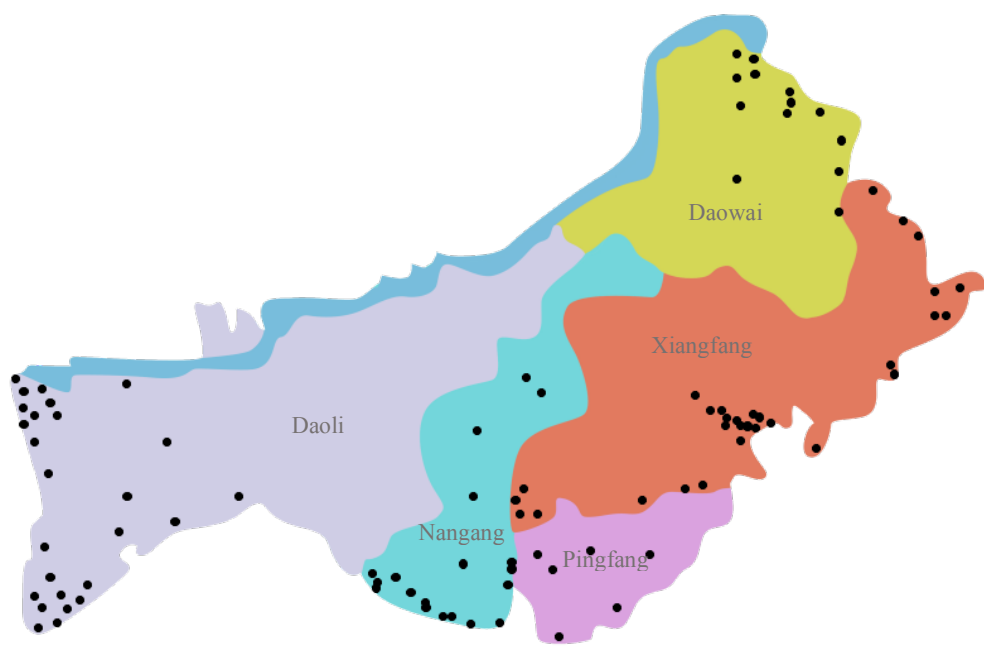


Figure 9 urban villages distribution in Harbin

The total area of the urban village in the main city of Harbin reached 225 square kilometers, involving a population of more than 130,000, and part of the population of urban villages has no land.

From the perspective of land ownership in urban villages, Daoli District, as shown in Figure 11 - 13, has the largest proportion, followed by Xiangfang and Pingfang District, and the area outside the road is the smallest.

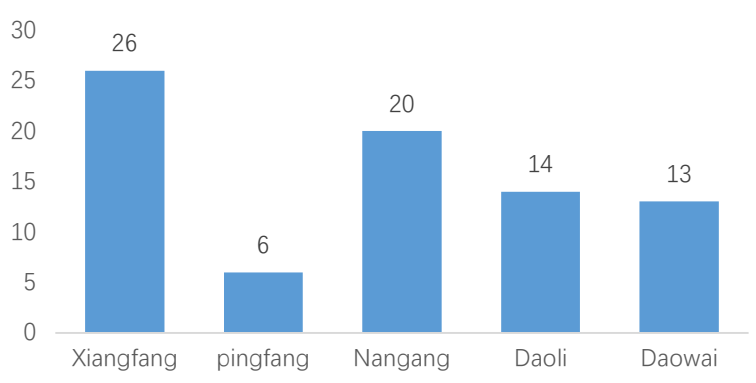


Figure 10 number of urban villages in different districts

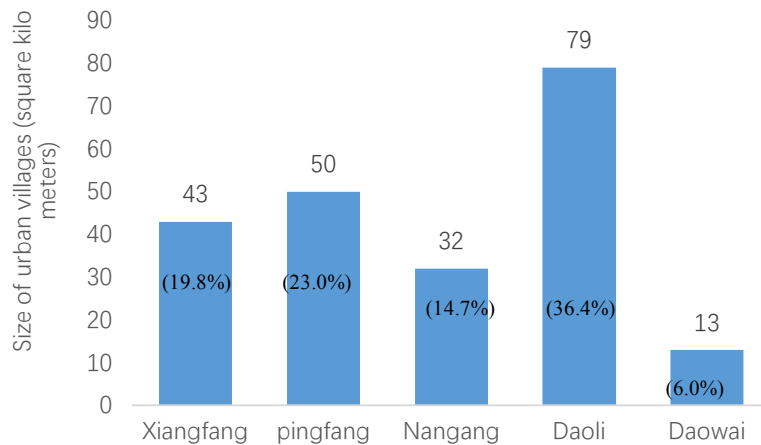


Figure 11 size of urban villages in different districts in Harbin

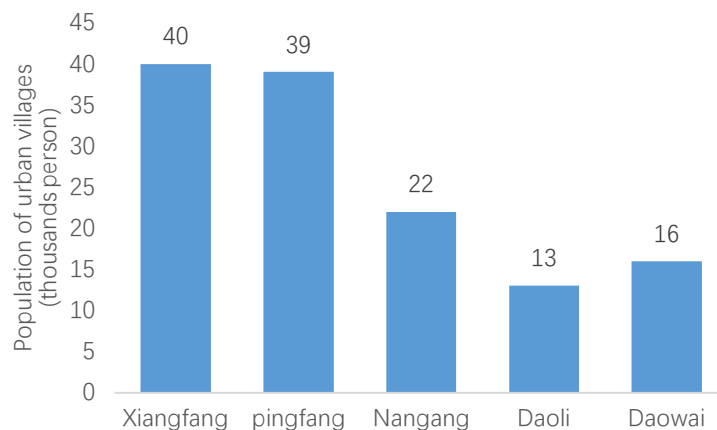


Figure 12 population of urban villages in different districts in Harbin

As shown in Figure 12 (from the perspective of the population), the population ratio of Nangang District and Xiangfang District is significant, and the comparison between the two shows that the per capita land ownership of Urban village in Nangang District is small. In the process of urban village reconstruction, special attention was paid to the employment of the population.

### 4.3 Urban village operation mode in Harbin

In order to understand the collaboration and social influence during the process of the urban village development. The management and economical operation mode in urban villages in Harbin is discussed.

The social structure and management structure within the urban village in Harbin continues to have more traditional rural concepts and is an “incomplete urbanization” area in the urban built-up area. It continues the management model of rural communities. In general, urban residents, except for some noble communities and high-ranking groups, they can enjoy social services

higher than those of ordinary urban residents. There is no fundamental difference between ordinary urban residents. The composition of personal assets is completed through the market and the income is obtained. The way is also convergence. The residents of the urban village can not only enjoy the treatment of the citizens of the urban residents in the general area, but also the treatment of the villagers. They take on the special benefits that are given to them under the rural management model. They still have homesteads with uncertain years and collective development land for profit in the conventional urban development environment. For residents in general urban areas, more is to enjoy urban public concepts or market-oriented services and management individually, and different urban areas are the same. In the community environment of the urban village, it not only has the concept of jurisdiction but also has a high social, clan and economic status. In many cases, collective organizations can not only undertake or replace the functions of neighborhood committees in general urban areas but can even obtain social functions higher than neighborhood committees. The power and ability of collective organizations cannot be replaced by the residents of the general urban areas.

Due to the special management mode of the urban village, there are very strong barriers to the whole society, including the low resource utilization efficiency and the unfair resource distribution caused by the land contract system. The urbanization management model not only breaks down the barriers, but also has the potential to infringe on the interests of the original managers of the urban villagers (Liu Y. , 2011). Judging from the development perspective, the urbanization management model may establish new development choices and development opportunities for urban villagers, but it is also likely to block past profit-making channels and change the structure of interest groups. Therefore, for the urban village, the introduction of urbanization management mode comes with certain risk. For the city government, the urbanization management model does not fully introduce the urban village, which not only has risks, but also the process of institutional cost accumulation over time.

The economic operation mode of the urban village is also different from the city.

*Table 6 different roles in urban villages*

<b>Role</b>	<b>Comment</b>
<b>Villagers</b>	Rent out residential and business houses to tenants and operators; consumption inside and outside the urban village.
<b>Tenants</b>	Work outside the urban village and earn income; rent the housing of the villagers in the urban village; consumption in and outside the urban village.
<b>Operators</b>	Work and live in the urban village; rent the shops of the villagers to engage in business activities; consumption in and outside the urban village.

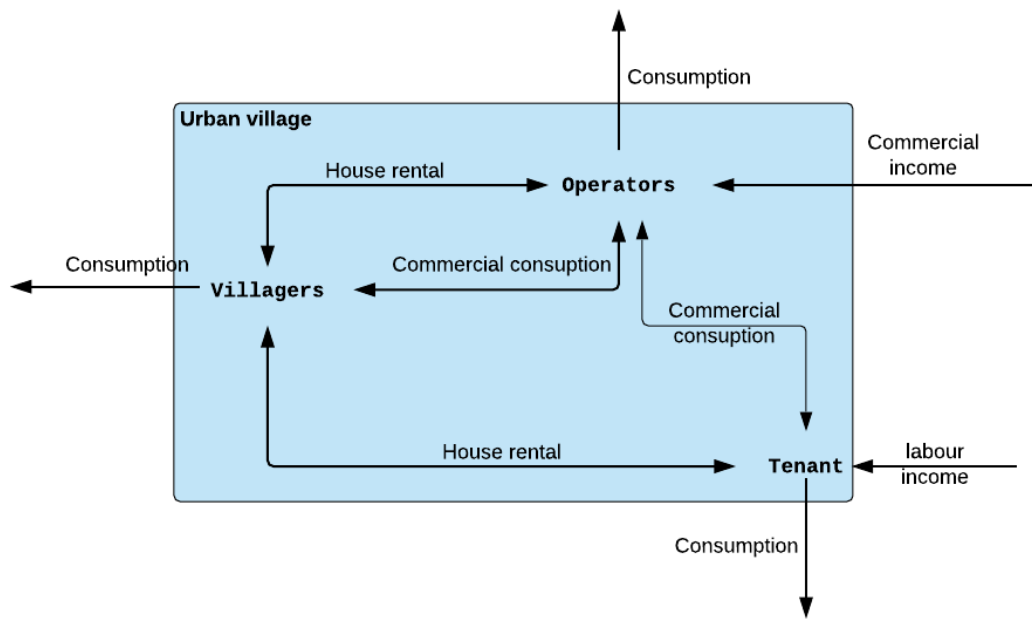


Figure 13 economic relationship between each role

According to the relationship, the people in the urban village can be divided into villagers, tenants and shop operators, including store owners and employees, referred to as operators. As shown in Table 6 and Figure 14 above, most tenants work outside the urban village and earn income, while renting the housing of the villagers in the urban village. Part of its consumption behavior occurs in the urban village and part of it occurs outside the urban village. Urban village are both the workplace of the operator and the place of living. The operator rents the shops of the villagers to engage in business activities. They provide goods and services to villagers and tenants in the urban village and consumers outside the urban village. Operators also generally rent housing for the villagers to live in urban villages. They are a special kind of tenant, which is different from the average tenant, so they are listed separately as a category to show the difference. Part of the consumer's consumption behavior occurs in the urban village and part of it occurs outside the urban village. The urban village is the basis of the villagers' lives. The villagers rent out residential and business houses to tenants and operators and spend their income inside and outside the urban village.

The economic function of the urban villages depends on two elements. Firstly, tenants in the urban village continue to provide rent and consume in the urban village. Secondly, people who work and live outside the urban village go to the urban village for consumption. Most of the urban villages are mainly supported by the first element, and a few urban villages are mainly supported by the second element, mainly relying on people outside the village to consume (Da, 2016).

Villagers, tenants, and operators can be divided into two categories according to where the income source occurs. The first category is the tenants whose income comes from the urban

village, and the other is the villagers and operators whose income comes from the urban village. The income of the tenants comes from the urban village and has little to do with the urban village regarding interests.

Most tenants are in favor of the urban village transformation, and some people say it does not matter, and few people object (BAIDU, 2019). The income of villagers and operators comes from the urban village and is closely related to the urban village. The transformation and regulation of urban villages will directly affect their interests. Their attitude towards the transformation of urban villagers is conditionally supported or opposed, which is, on the condition that they do not harm their interests.

#### 4.4 Urban village regeneration in Harbin

The regeneration of the urban villages in China is an inevitable choice for China's urbanization process. As an important means of production, land plays an important role in urban population accommodation. The existence of urban villages often occupies the prime location of the city and cannot be effectively utilized due to the lack of unified planning and management of the city. Although many urban villages occupy a superior location of the city, they are far behind the other urban areas with relatively poor conditions in comprehensive development. In my opinion, it is a great waste of valuable land resources.

There are many problems in urban villages. In Harbin and also other cities in China, most of the urban villages have inadequate residential facilities and poor sanitation. The specific performance is low in the rate of residential units, low roads, uneven drainage, and lack of garbage storage places. The villagers have inconvenient living low quality living environment. Although they live in the same city, they have a big gap compared with the living environment and quality of urban residents (Da, 2016).

In addition, the villagers in the villages in the city are difficult to integrate into urban life. Generally speaking, the communities in which the villages are located are the starting places for the rural areas to turn to marketization and urbanization. In this advanced and rapid non-agriculturalization, the villages have accumulated considerable collective assets. The villagers in the villages in the city generally rely on collective asset dividends, land compensation payments and housing rental fees to enjoy their success, and there are group phenomena of gambling, lounging, and doing nothing, becoming a new type of “food class”. Therefore, in my opinion, the transformation of urban villages must start from the long term, such as improve the quality of villagers, help villagers to complete the transformation from villagers to the citizens, integrate them into the urban community as soon as possible, and provide community services such as education, training, employment, social security, etc. The problem of these villagers who live in the city is that their mind is so different from the mind in the city. Although the villagers in the village are living in the city, their ways of thinking, and behavioral norms in some of the rural areas are not easy to change. After they lose their land, they pin their hopes for survival and development. In the rental of houses, this has caused the illegal construction of the villages in the city. At the same time, many social problems have arisen due to the concentration of migrants. These social problems will be discussed in detail in chapter 5.

The transformation of urban villages is not an isolated issue, but a significant work closely related to the urbanization process and the realization of urban modernization goals. It is an important choice for comprehensively improving the quality of life and social development of the people, and optimizing urban land resources.

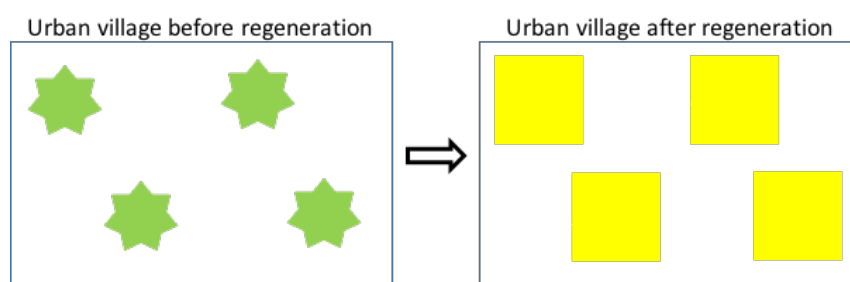
Based on the specific situation of urban villages in Harbin, four types of redevelopment mode are chosen: complete regeneration mode which refers to the transformation from the overall layout of the city, local regeneration mode which refers to demolishing some of the buildings in the village, comprehensive improvement mode which refers to reducing the number of existing buildings and complete relocation mode which refers to compensate and resettle the population of the village.

According to the Harbin Housing and Urban-Rural Development Office(2017), ten urban villages in the Daoli district will be redeveloped in the complete regeneration mode, with the largest proportion, followed by Xiangfang and Nangang. Twelve urban villages in Xiangfang and Nangang district will be redeveloped in the local regeneration mode, while nine in Daoli, Daowai, and Pingfang district. For the comprehensive improvement mode, Xiangfang and Daowai district has the highest proportion with three urban villages. For the complete relocation mode, Xiangfang District has five urban villages, which is the largest number. In the process of transformation, the transformation model of urban villages in the region is analyzed, and the choice of transformation modes is different.

### **Complete regeneration mode**

The complete regeneration mode refers to the transformation from the overall layout of the city to the construction of the individual in the urban village. The relocation of the model in the process of reconstruction has a large amount, high costs, and heavy tasks. Through the demolition of the original buildings, the environmental problems of the village in the village can be greatly improved, the quality of the environment can be improved, and the serious conflicts between the villages in the city and the urban landscape can be eliminated. Residential buildings can be built in the original residential area. Urban villages and cities have undergone reformation.

The community is basically the same. The reform model is divided into two forms. The first is a one-time reconstruction. This form generally requires more start-up capital, a long recovery period, residents' one-time relocation, and unified relocation. The second is gradual, batch reform, and batch resettlement, which doesn't require the land funds in place at one time. As shown in Figure 15.



*Figure 14 complete urban village regeneration mode*

Table 7 urban villages in Harbin with complete regeneration mode

District	Urban village
Xiangfang	Chaoyang village, Xingfu village, Fumin village, Jinxing village, Pingshun village, Minzhu village
Nangang	Yongfeng village, Hongqi farm, Zhenxing village, Lalin village, Xingli village
Daoli	Xingfu village, Minzhu village, Youyi village, Jinshan village, Hongxing village, Chengxiang village, Chengxi village, Shengli village, Wuxing village, Xianfeng village,
Pingfang	Xinhua village, Pingle village
Daowai	Liancheng village, Hengxing village, Dongxin village

**Local regeneration mode**

The local regeneration model is to demolish some of the buildings in the villages in the city, mainly to renovate houses in the village that are in violation of the construction, houses that are in danger of dilapidation and poor lighting conditions, and to repair the houses available in the village.

The governance of the urban village environment will mainly focus on the reconstruction of areas with higher value for urban development. To coordinate with the development of the city. In the vicinity, the construction of a new village can be carried out. At the same time, the old village should be controlled to prevent its expansion. The old villages are combed and the facades are trimmed, as shown in Figure 16.



Figure 15 local urban village regeneration

Table 8 urban villages in Harbin with local regeneration mode

District	Urban village
----------	---------------

<b>Xiangfang</b>	Dengjia village, Mujia village, Hongxing village, Shuangyushu village, Qianjin village, Xinfu village, Xinyi village, Jijia village, Xingfu village, Beizuo village, Caojia village, Heping village
<b>Nangang</b>	Yuejin Street, Yongjiu village, Jinhua village, Wanggang village, Xinsheng village, Hada village, Fangshen village, Kaoshan village, Weixing village
<b>Daoli</b>	Qingfeng village, Jianguo village
<b>Pingfang</b>	Dongfu village, Hanzhen village, Gaochao village
<b>Daowai</b>	Dongguang village, Hongguang village, Shuguang industrial Co., Ltd, Yuejin Industrial Co., Ltd

### Comprehensive improvement mode

The comprehensive improvement mode is to reduce the number of existing buildings as much as possible, increase the use of public land such as parks and waters in the villages in the city, and strictly control the construction of new projects. This mode requires less funds, the amount of work is small, and the impact on the life of the residents is small. It is better to adopt this model in urban villages where the transformation is less difficult. As shown in Figure 17.

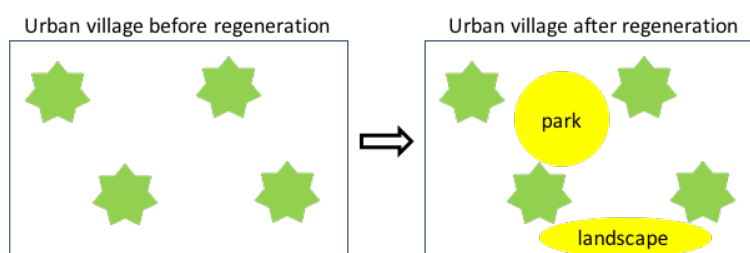


Figure 16 comprehensive urban regeneration mode

Table 9 urban villages in Harbin with comprehensive regeneration mode

<b>District</b>	<b>Urban village</b>
<b>Xiangfang</b>	Yuanyi village, Xin Xiangfang, Xincheng village
<b>Nangang</b>	Wangjiadian village, Dingxin industrial Co., Ltd
<b>Daoli</b>	Xiangdong village, Xinfu village
<b>Pingfang</b>	Hanjiadian village
<b>Daowai</b>	Fengguo industrial Co., Ltd, Qianjin industrial Co., Ltd, Heping industrial Co., Ltd

### Complete relocation mode



The complete relocation mode is in serious conflict with the development of urban villages and cities in the middle of the city. It compensates and resettles the population of the village in the city. Most of the houses are simple. In my opinion, there are no important cultural relics, there is no nationality, so the significance of reservation is not great, the redevelopment should use the complete relocation mode as shown in Figure 18 below.

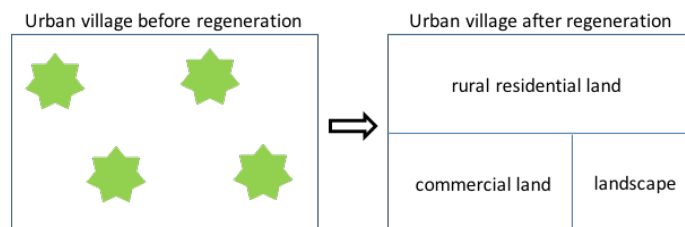


Figure 17 complete relocation mode for urban regeneration

Table 10 urban villages in Harbin with complete relocate regeneration mode

District	Urban village
Xiangfang	Anle village, Xianfeng village, Dongsheng village, Hongsheng village, Zhenxing village
Nangang	Hongxing village
Daoli	Qunli village, Songjiang village, Dongming village
Daowai	Weixing industrial Co., Ltd, Yinxing industry and trade Co., Ltd, Unity Boiler Factory

### Potential problems in urban regeneration in Harbin

The regeneration of the urban villages in Harbin is ongoing. There are some potential problems for the regeneration process, as compared with the other regeneration cases in China.

#### Problem 1: Funding problem

At first, urban regeneration is associated with the urban regeneration, which happened in the western cities, including North America and Europe. The features of the urban degeneration are deindustrialization, depopulation and buildings abandoned, etc. Even the phenomenon is different between different cities and countries, the development and implementation are always needed. When opportunities and challenges come up in a certain situation and certain phase of urban regeneration, the process of urban village regeneration starts. (Peter, Hugh, & Rachel, 2016). The funding and finance of the urban regeneration in China could be divided into four cases (Chunge & Keguang, 2009)

- 1) plan together, regenerate separately

This is advocated by the National Development and Reform Commission from the People Republic of China. In this model, the government is the source of investment. The project is centralized by the government-established specialized agency or commissioned by the project management company in the market. After the project is completed, it will be handed over to the village collective or the user. The villagers will collectively be responsible for the operation of the project. Under this model, the government commissioned a specialized agency or company to act as a developer and directly invest in the transformation of the urban village to solve the problem of resettlement and resettlement of the villagers and achieve the transformation goals. This model is more common in large-scale projects such as the construction of university cities and industrial parks. The advantages of this model: It can fundamentally solve the problem of "villages in cities". Besides, it can guarantee the quality of transformation, while at the same time can directly reduce part of the cost. The limitations are: Applicable to large-scale projects located on the edge of the urban area. The cost of demolition and relocation is low, the development cost is small, and the problem of urban villages is not obvious.

#### 2) plan and exploit together

This type is recommended by the State Development Planning Commission in China. The funding is dominated by the government. Local government will assign a group of people to take care of the reconstructing. The reconstructing institute could manage the project itself or entrust it to the other project management company. After finishing the reconstructing, the rest of the regeneration project and the renewed village will be charged by the village administration.

#### 3) government dominant, estate developers exploit

Different from the previous way of government direct investment, the new idea of this type is "government guidance, policy promotion, market operation, the villagers involved". In this situation, the government just play the role of guiding and supervising, cooperating with the private sectors. Besides, the way of open tender and policy incentive are also used to reduce the burden of government finance, avoid the market operation risk, ensure the village transformation quality, and speed up the transformation process. Besides, in order to attract more estate developers participating in the regeneration, the government gives up some of the potential benefits, for example, reduce part of the land price and pay part of the cost, to ensure the regeneration project profitable.

In 2004, 156 of the urban villages in Wuhan are regenerated. The feature of this transformation is the thorough marketization of land transfer. Half of the 26 "villages in the city" in Zhuhai City have been transformed using this model, and Liede Village in Guangzhou which has also passed 'land property rights replacement developer property', also applied this mode of operation innovatively.

#### 4) public-private partnership

In the types above, the regeneration project is dominant by the government, while the private sector plays a less important role who is not involved in some phase of the project, such as pre-project argument, etc. It limits the technology innovation from the private sector. In the public-

private partnership type of regeneration project, public sectors and private sectors cooperate with each other. The most common way is that the government invite tenders for the project, while the winning private entity will manage, finance or construct. In return, the private entity could get part of the earning from the project or payment from the government directly. (Wikipedia, 2018)

Table 11 comparison for different funding way

	advantage	disadvantage	cases
<b>plan together, exploit separately</b>	Ensure the interest of the resident, low regeneration cost, easy to balance the interest distribution	Less regeneration project experiment, quality cannot be ensured, hard to consider the infrastructure regeneration	Guangzhou Huadiwan, Shijiazhuang, Baoding, Langfang, etc.
<b>plan and exploit together</b>	Ensure the quality, consider in social, environmental and urban landscape level at the same time	Huge investment for the government, less market involvement, cannot maximize the land value	Shenzhen, "New World" in Shanghai, Guangzhou University City
<b>government dominant, estate developers exploit</b>	Less government investment, reduce the risk of the government, speed up the regeneration process	Lost of the land value, resident cannot be involved, more social issues	Guangzhou Liede Village and Zhuhai Village
<b>public-private partnership</b>	Maximize the land value benefits	More investment, high risk, high requirement of the developers	Wuhan

The situation of Harbin should be considered to choose which type is more suitable for the regeneration funding.

## **Problem 2: Compensation for the original residence is hard to decide**

Problems in the current compensation system:

- 1) The value of the rural land is unmeasurable, so it is hard to decide the compensation (Chan, 2003). In Commonwealth countries, the compensation is based on the "just

terms compensation", which is like the property is not taken from him. In China, the compensation of the rural dispossession is based on the market value of the land. However, there is a disparity between the rural and the urban area, as the farmland cannot be sold, which means the market value of the farmland cannot be established.

- 2) The consequential loss cannot be compensated properly (Chan, 2003). In the UBDRAR Reg33<sup>1</sup>: just compensate the influenced business and production. The other consequential financial loss, such as the removal loss, charge for relocation, etc. will not be compensated. Besides, the amount of the compensation doesn't have a clear definition. In the regulation, it is just mentioned that the affected business should be compensated suitably. But the "suitable" is hard to decide for specific circumstances.
- 3) The non-possessory interest of the land is not considered (Chan, 2003). In the United States, any interest in land, such as the easement and leasehold are considered in the compensation, while they are not mentioned in the regulation in China. As a result, people like the tenants whose contract haven't been finished will not be compensated.
- 4) In the Urban Buildings Demolition Relocation Administration Regulations, it is unclear whether the original residence could ask for the compensation themselves if the government or the regeneration project owner didn't offer them any (Chan, 2003). There are two conditions. One is for the residents which are not satisfied with the compensation that the regeneration project gave them. They have no right to reject the offer but accept what is offered. Another is for the residents who didn't get any compensation. They have no right to ask for payment.
- 5) The People Republic of China Land Administration Law and the Urban Buildings Demolition Relocation Administration Regulations just give general rules for the regeneration compensation (Chan, 2003). As the detailed compensation rules will be given by each area (city, province, etc.), the disparity and opacity may exist. For example, in the procedures of compensation for houses in Shanghai municipality, it is mentioned that the business which is interrupted by the regeneration will be compensated, but how to calculate the compensation is not mentioned. In the Maan (in Anhui Province) regeneration project, the compensation rules announced that the title holder will get 30% of the compensation, while the occupier will get 70% if the compensation. However, how the proportion is defined and calculated is not mentioned. It ignores the possibility that the title holder or the occupier may lose more in some instances.

### **Floating population**

The migration population in China is vast. It is even more extensive than the population combination from the UK, Italy, and Germany. Within the migration population, the floating population is the ones living in the cheap rental house with low income (Armstrong, 2013). Floating population is one of the hot topics with significant amount of attention. The floating

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<sup>1</sup>UBDRAR Reg33 is the 33 regulation of the 2001 Regulations on Urban House Demolition Management. In the regulations, it is mentioned that for non-residential users, UBDRAR only provides for appropriate compensation and/or closure of business for losses caused by the cessation of production.

population has the social and economic influence on not only the cities but also the urban cities. The floating population in China will reach 291 million, as announced by the Chinese Health and Family Planning Commission. (Geyang, 2015) This floating population plays an essential role in the urban village, which is in the urban area but has less cost of living. They live in the urban village, while working in (China Daily, 2010) the city. If the urban village is regenerated, they will lose their place of living.

China's 'ant tribe' is also considered. The term of 'ant tribe' is raised by a Chinese sociologist LianSi. It refers to the young people who just graduated from the college with a high educational level but low income (He & Mai, 2015). Most of these young people come from the poor countryside or less developed cities. They want to work in large cities to earn high salaries, but they haven't got enough income to afford expensive housing in the urban area. If they lose the chance to live in the urban village area, life will be harder for them. The living condition of these people should be considered by the regeneration project owner.

## 5. Urban villages and urban village in Harbin influence housing market

### 5.1 Introduction

In the past 20 years, China has experienced a rapid urbanization process. The level of urbanization has raised from 17.9% in 1978 to 43.9% at the end of 2016. (China Real Estate Association, 2018) The urban area has rapidly extended to the suburbs. In the rapid expansion of urban built-up areas, farmland was quickly requisitioned for construction, while villages with demolition and resettlement phases were preserved, forming large and small urban villages within the urban built-up area. All housing in the urban village area is divided into two types: one is housing built on state-owned land; the other is the simple houses built on collective land. Both types of housing are sources of the housing for the original urban population and the migration population.

The urban villages in the city have an influence on the surrounding area and the city's estate market. Based on the previous study, the price of the houses is related to their distance to the closest urban village. (Song & Zenou, 2011) This relationship will be tested in the Harbin estate market based on the Harbin housing data in this chapter.

Besides the influence of urban village, the regeneration of the urban villages also has an influence on the housing market. Based on the previous study, the average price of commercial housing provided by the urban village renovation to the market has an obvious pulling effect on the average price of the housing market. In this chapter, the influence of the urban village regeneration in Harbin on the housing market will be analyzed and discussed.

The urban development in Harbin is lagging behind, as compared other capital cities in China. However, the five districts (Daoli, Daowai, Pingfang, Xiangfang, Nangang) are the fastest-growing urban areas in Harbin in the past ten years, and they are also the areas where Harbin's urban villages have undergone major transformation. Due to the fact that these districts are in the transformation work of Harbin urban village, the speed of start-up and advancement is relatively fast, which has the most significant impact on the local real estate market. The impact on the real estate market is also strongest in the predictable time range.

In this chapter, the influence of the urban village and the urban village regeneration in Harbin on the housing market in Harbin is discussed. In section 4.2, how the urban village influence the estate market is illustrated, including the influence to the housing supply, the housing value, and the house rental price. The relationship between the house value and distance to the closest urban village is explained based on a simple regression model. The data will be collected from the report from the government official website and the prices offered in the housing agencies. In section 4.3, how the urban village regeneration influence the housing market is explained, including influence to the housing land supply, the housing market demand, the equilibrium of

the market, and the house value. The discussion in this section is based on the case of Harbin Hada village.

## 5.2 Urban villages influence the estate market

The houses in urban villages are quite different from the houses in the urban area. The houses in urban villages have lower population density, and lower housing rental price, while the houses in the urban area have a higher population (because of the high-rises) and higher housing rental price. The lower price advantage of urban village houses attracts a large number of mitigations. At the same time, the houses located close to the urban villages are also influenced because of the environment in urban villages. In this part how the urban village influences the housing supply, housing value and housing rental will be discussed. And in the end, problems exist in the current urban village houses are proposed.

### 5.2.1 Urban village influence the housing supply

Harbin is the capital of Heilongjiang Province, situated in the southern part of the Heilongjiang Province. It is one of the central cities in the northeastern region. The cultivated land is concentrated and contiguous, and the forest land is large. It is the main agricultural, forestry and animal husbandry production base in the province. The Harbin city's land area is 5,307,648 hectares (the survey data of land use change in 2005 is 5,306,165 hectares), accounting for 11.7% of the total land area of the province. It is rich in land resources and diverse in land use types, providing favorable land conditions for economic and social development.

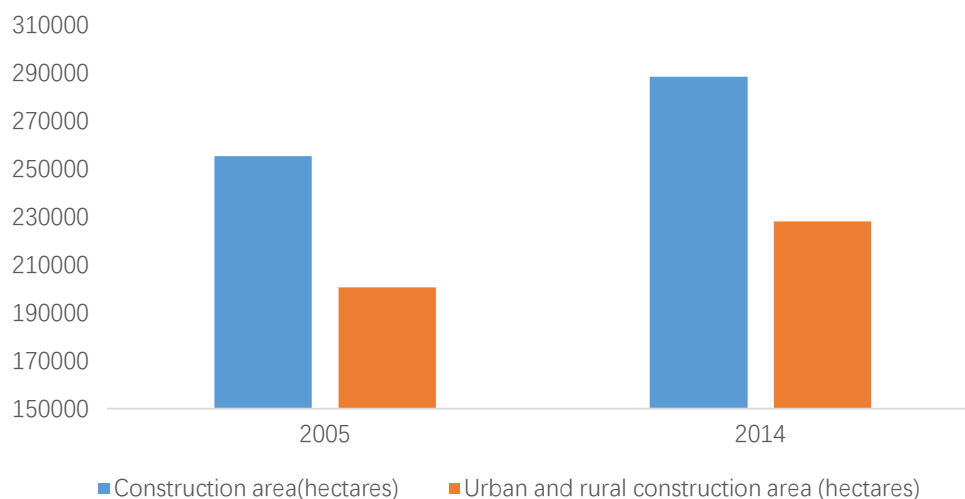


Figure 18 increasing construction area in Harbin

As shown in Figure 19, according to the Harbin Bureau of Land and Resources, in 2005, the construction land area (for housing) of the city is 255,475 hectares, accounting for 4.8% of the total land area of the city, and among them: 200,853 hectares are urban and rural construction land, accounting for 3.8% of the total land area of the city. In 2014, the construction land area

(for housing) of the city is 288,761 hectares, accounting for 5.4% of the total land area of the city, and among them: 228,234 hectares are urban and rural construction land, accounting for 4.3% of the total land area of the city. From the beginning of 2005 to 2014, a total of 65 lands in Daoli District were traded on the primary land market and obtained land use planning permits. There are 12 projects involving urban villages in Daoli District, accounting for 19% of the total. There are 4 projects involving the demolition and relocation of farmers in the urban village, and 5 projects belonging to collective land use. (Harbin Bureau of Land and Resources, 2018)

### 5.2.2 Urban village influence the housing value

In this report, statistical analysis and single regression methods are used to analyze how the housing value is influenced by the surrounding urban villages. In section 5.2, the numeric dependent variable (housing value of different districts in Harbin) will be predicted and explained by the values of independent variable, which is the distance to the closest urban village. This variable is selected to show how the urban villages influence the surrounding area. After evaluating the bivariate correlation between the dependent variable and the independent variable, the independent variables significantly influencing the variable is included in the regression analysis. The analysis reveals a good quantitative model showing in which direction and to which degree the dependent variable is affected by a certain independent variable. In the end, based on the outcomes of statistical and multiple regression analysis, the results are analyzed. Throughout the research, data were analyzed using SPSS for Windows version 22.0 (IBM Corp, 2013).

The data used in this chapter is collected by the author from the China housing market (China Real Estate Association, 2018), Harbin well-living website (2018), the Souhu concentration (Miao, 2017), the PC housing (2017), and the Harbin housing market report (2016). The characteristics of the data are in Table 11 below.

*Table 12 collected data and variables in the regression model*

	Variable	Comment	Character
<b>Dependent variable</b>	Housing value	Data collected from housing agencies in five main district in Harbin	All the housing values are collected from housing agencies on June 2018
<b>Independent variable</b>	Distance to the closest urban village	Distance measured on the Harbin map. The urban villages are from the Harbin urban village planning department	The distances are integers, as the exact distances are hard to measure

As shown in Table 12, the collected data in section 4.2 is the housing value in Harbin and the distance from the house to the closest urban village. The housing value is the dependent variable, while the distance to the closest urban village is the independent variable. The housing value data is collected from housing agencies in five main districts in Harbin (Daoli district,



Daowai district, Nangang district, Xiangfang district, and Pingfang district) on June 2018. The distance from each house to the closest urban village is measured on the Harbin map. And the distance data is kept with one valid number, as the distance is hard to measure on the map.

### 5.2.2.1 Data cleaning

#### **Purpose**

As the process of detecting and correcting (or removing) corrupt or inaccurate information from the database, data cleaning excludes wrongly filled data and observations. As for the missing values, appropriate methods are being used to remove the cases or fill with the alternatives. The purpose of data cleaning is to make sure that the data are complete, accurate and relevant, avoiding the bias and the misleading situations.

#### **Process of data cleaning**

Above all, the cases which are lack of information, such as location is too vague, price range is too wide, etc., are removed from the data file. Then using the missing value analysis of SPSS for Windows version 22.0 (IBM Corp, 2013), it can be learned that how many missing values each variable has and the number of extreme values.

The cases with missing values are deleted. Again, scanning all the data is required. In this step, the main goal is to exclude the cases which are not reasonable. Finally, there is a data file which includes 160 cases for the further research.

#### **Contribution of data cleaning**

Data cleaning contributes to the accuracy of the statistical analysis results, as it has potentials in minimizing the following types of error:

- 1) Over-covering error: Error occurs if there is an observation in the sample that does not belong to the sample population. For example, in this research, the sample should be housing in the Harbin main city (within Daoli, Daowai, Nangang, Pingfang, and Xiangfang district); therefore, the houses which are not in this area should be removed.
- 2) Processing error and measurement error: As for the former one, error exists due to the disturbance in data processing and as for the latter one, the error arises if any observation does not represent the reality.

#### **Summary**

After cleaning the data and studying the missing values, there is a reliable and accurate database for the further research. In the next section, the report discusses the characteristics of the sample.

### 5.2.2.2 Representative test

#### **Purpose**

The statistical analysis aims to deduce conclusions about the characteristics of a population using limited information gathered from a small number of sample elements. To ensure the

conclusions drawn from the sample set are applicable for the population, it is essential to check whether the sample set is a good representative of the population.

Two variables that depict the characteristics of individual houses (year and size) can be used for the representativeness test purpose. As the population of the research is defined as the houses in Harbin city, the size and year should be as considered in full-scale. Otherwise, the sample is not a good representative subset of the population, and the outcomes of statistical analysis should be interpreted carefully.

### Methodology for Representativeness Test

Chi-square test is a type of statistical test that can be utilized for this representativeness testing purpose. It differentiates the observed distribution of a certain variable in the sample to the expected distribution. For this purpose, sample distributions of size and year are compared to the population distributions, which are available on the Internet. The average housing values in each district are found out and compared with the collected data. (Ranking net, 2017)

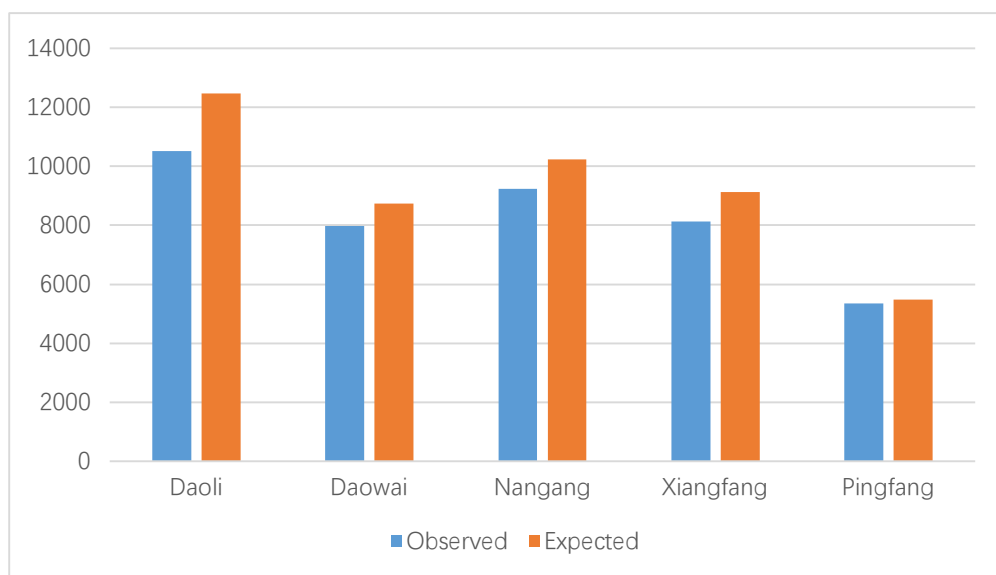


Figure 19 observed and expected price distribution

Figure 20 depicts the differences between observed (i.e. sample) and expected (i.e. population) distributions. It shows that the difference between districts in sample and population does exist. The observed data is relatively lower than the expected data. The Chi-square test is carried out to qualify if the collective data could be represented by the population.

Chi-square test is employed in this case, as it indicates whether the difference is significant, such that the sample is not a representative of the population with respect to gender. The outcome of the test, shown in Table 13 indicates that the sample is representative of people with respect to the district.

Table 13 Chi-square test result for the average price in different district

Variable	Type of test	Value	Sig.
----------	--------------	-------	------

Average price in different district	Chi-square	3.171	.000
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As shown in the chi-square result, the sample distribution is not significantly different from our population distribution. The collected data is representative of the housing value in Harbin.

The significant differences could affect the reliability of the analysis' outcomes, especially if it is later found that the housing value is related to the district it belongs to, as it would be risky to generalize the relation found in the sample for the population.

On the other hand, as the region of residence is considered as the categorical variable, the non-representativeness of the sample with respect to this variable will not significantly affect the analysis' outcomes, as the sample can still be used to assess the differences in housing value across groups of districts. Moreover, a predictive model for housing value can be easily developed for each district, if the variable is found to be significant in explaining the variation in the housing value.

### 5.2.2.3 Descriptive statistics

This chapter shows information about the most important variables in this study with certain graphs and statistical measures. The reason why the description of a specific variable is involved in the main report is discussed below.

#### Housing value

Housing value is the independent variable of this research, so it is easy to say that it is an important variable, and we care about its distribution. The distribution of housing value in Harbin is as follows. The minimum collected housing value is 2376, while the maximum of the collective data is 38461. As shown in the Figure 21, most of the collected housing value is lower than 10000 Yuan/m<sup>2</sup>, which is almost half of the whole sample. The houses with the value higher than 20000 Yuan/m<sup>2</sup> has the smallest group.

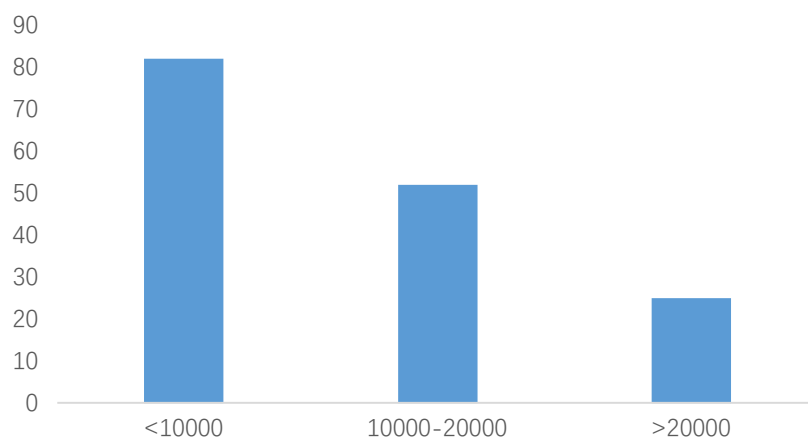


Figure 20 housing value distribution in Harbin

To further discover the housing value data, the collected data are analyzed in SPSS for Windows version 22.0 (IBM Corp, 2013). As shown in the descriptive statistics analysis below, the scale from the housing value is from 2376 to 38461. The scale of the distance to the closest urban village is from 1 to 9, because of the significant digit of the sample.

Table 14 descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
housing value(Yuan/m <sup>2</sup> )	159	2376	38461	11794.87	8683.227
distance to the closet urban village(km)	159	1	9	5.60	1.776
Valid N	159				

As shown in Table 14, the number of valid cases of house price (Yuan/m<sup>2</sup>) and distance from the nearest city village is 159, and the minimum price (Yuan/m<sup>2</sup>) is 2376, the maximum value is 38461, and the average is 11794.87. The difference is 8683.227; the minimum distance from the nearest city village is 1, the maximum is 9, the average is 5.6, and the standard deviation is 1.776.

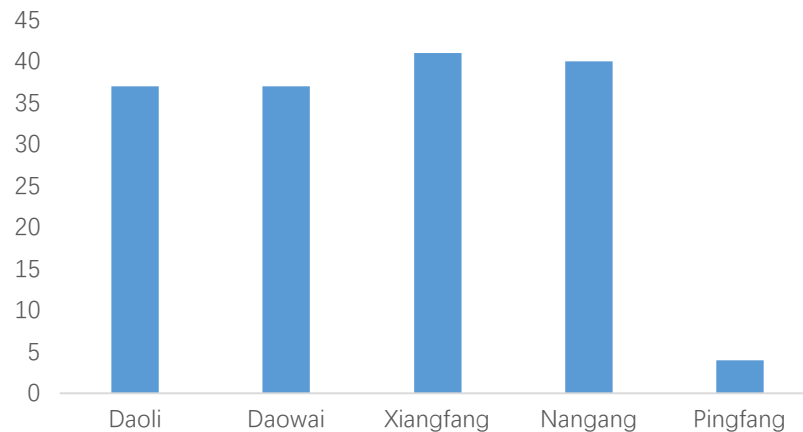


Figure 21 the number of collected houses in the different district

As shown in Figure 22, most of the houses are selected from the Daoli district, Daowai district, Xiangfang district, and Nangang district. There are only four cases selected from the Pingfang district, because there are not a lot of selling houses in the Pingfang district. The houses in Pingfang district will not be considered in this part of the report.

#### 5.2.2.4 Bivariate relation analysis

##### Purpose

Statistical testing of bivariate relation helps in determining whether a relation is statistically significant and hence applicable for the population. It cannot be used to verify nor falsify any hypothesis about the relation of two variables, but it can suggest whether the relationship exists in the population.

The accuracy of the test depends on its significance level, which indicates the probability of incorrectly rejecting its null hypothesis of the test, which states that there is no relation between general satisfaction in winter and the independent variable. In most cases, researchers use a significance level of 0.05, indicating that there is a probability of 5% for the test to draw a wrong conclusion, such that an insignificant relation is found significant. Throughout this study, the significance level of 0.05 is used.

### **Bivariate test employed in the analysis**

As housing value and distance to the closest urban village are numerical variables, the Pearson's correlation coefficient test or Spearman's rank correlation coefficient should be used. Since no extreme value exist in satisfaction of duration of delay variable, and there is a relation between housing value and distance to the closest urban village, Pearson's condition can be used.

*Table 15 Pearson Correlation*

		housing value(yuan/m2)	distance to the closet urban village(km)
housing value(yuan/m2)	Pearson Correlation	1	.662**
	Sig. (2-tailed)		0
	N	159	159
distance to the closet urban village(km)	Pearson Correlation	.662**	1
	Sig. (2-tailed)	0	
	N	159	159

\*\* Correlation is significant at the 0.01 level (2-tailed).

As shown in Table 16, the price (Yuan/m2) and the distance from the nearest urban village (km) are related to each other. It can be seen that the two variables are significantly positively correlated at the level of 0.01, and the correlation coefficient is  $R=0.662$ .

### **5.2.2.5 Model estimation**

It is also beneficial for having a quantitative model that is useful for analyzing the dependency of the independent variable on the independent variables.

Regression analysis is a method to find the best quantitative model that explains the variation independent variable. It aims at minimizing the total difference between its predicted values

and the observed values in a sample, such that the amount of variance explained by the model is optimized.

Based on the Pearson correlation test from section 4.2.2.4, there is a relation between the housing value and the distance the closest urban village. The quantitative relation is shown in the Table 17 and Table 16 below.

Table 16 regression model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.662	0.438	0.434	6529.937	0.759

a Predictors: (Constant), distance to the closet urban village(km)

b Dependent Variable: housing value(Yuan/m2)

The linear regression analysis was carried out with the house price (Yuan/m2) as the dependent variable and the distance from the nearest village in the city as the independent variable. It can be seen from Table 16 that the model has R=0.662, R2=0.438, adjusted R2=0.434, and Durbin-Watson is 0.759, indicating that each sample is independent, indicating that the model fit is ideal and the following regression can be performed.

Table 17 coefficient result of the regression model

Coefficients <sup>a</sup>										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	-6320.411	1717.441		-3.680	.000	-9712.682	-2928.140		
	distance to the closet urban village(km)	3236.326	292.543	.662	11.063	.000	2658.498	3814.155	1.000	1.000

a. Dependent Variable: housing value(yuan/m2)

After the analysis is performed, a preliminary regression model that explains the housing value is obtained. The preliminary model is:

$$y = -6320.411 + 3236.326x$$

Where y is the housing value, x is the distance to the closest urban village. It can be seen from Table 17 that b=0.662, t=11.063, p<0.05, and does not contain 0 in the 95% confidence interval, and there is no problem of co-linearity. As shown in the regression result, relationship between the distance from the nearest city village and the housing value is positive. When one house is close to the urban village, the value of that house is low. On the other hand, houses far away from the urban village have higher price.

In order to get further information of the model, the scatter plot of the regression model residuals are shown in Figure 23 below.

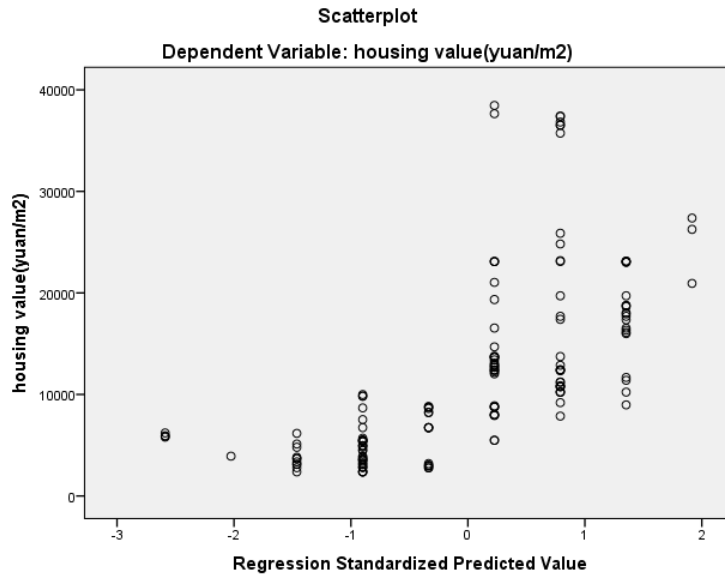


Figure 22 residual scatterplot for the housing value regression model

As shown in Figure 23, which shows the plot of residuals in the model, some observations are found to greatly influence the regression model, as their values are situated far from other data points and/or regression line. These observations should be removed from the analysis, as they cause disturbances in the reliability of the model.

Furthermore, by looking at the residual plot, it shows multiple parallel lines. Searle (1988) elaborated the cause of this behavior and mentioned that these parallel lines exist due to the nature of  $y$ . For example, when  $y$  is a dichotomous variable (one or the other, e.g. male or female) the residual plot will show two distinct lines in the scatter plot when  $y - \hat{y}$  is plotted against  $\hat{y}$ . The residual plot in the Figure indicates seven parallel lines which are in correspondence with the dependent variable that was measured in integers.

### 5.2.3 Urban villages influence the housing rental

The Chinese National Bureau of Statistics carried out a 1% census in China in 2005. Using the analysis of the census data, it can be concluded that the urban village housing is an important source of the housing for the urban resident population. As shown in the Figure 24, within the national city, the housing area of the urban village accounts for 33% of the total housing area of the city. The number of housing in all cities accounted for 30.6%; the housing in urban villages solved the housing problem of 29.5% of the permanent residents. (National Bureau of Statistics, 2008)

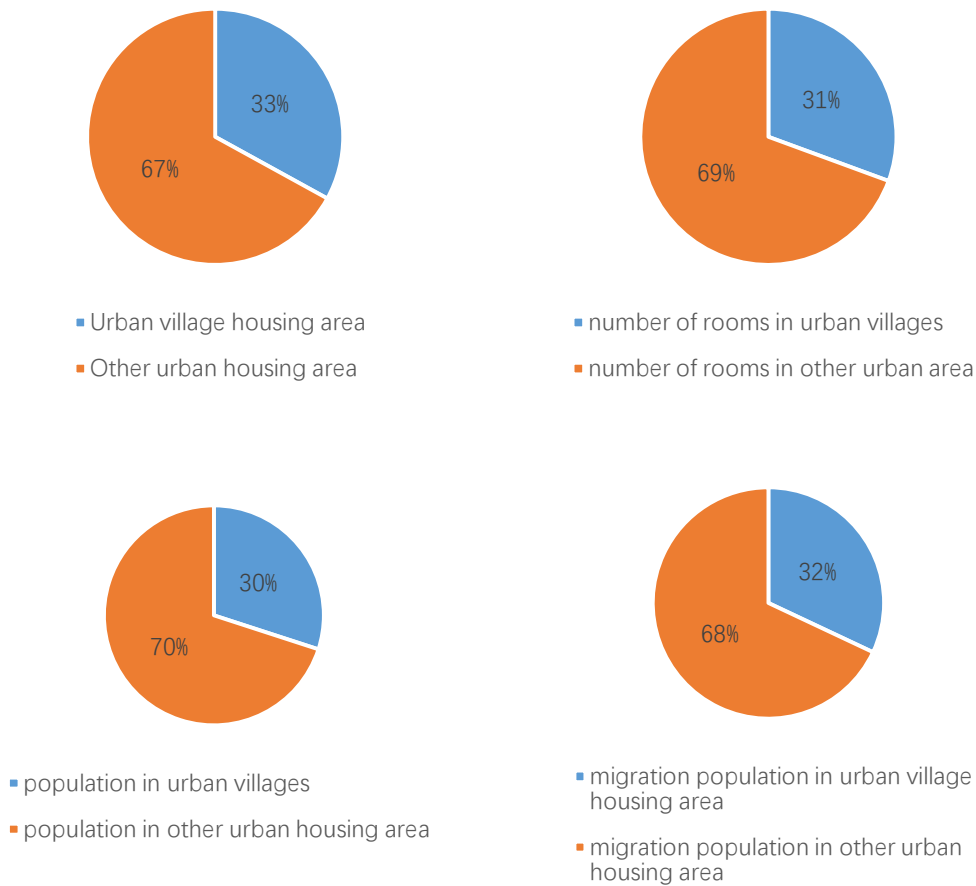


Figure 23 urban village plays an important role in the urban area housing

After the reform and opening up, the population movement has intensified. Among the large and small cities in the country, the migrant population has become an important component of urban residents. In 2005, the proportion of migrants in the country's cities was 28.6%. The rural household registration and non-agricultural household registration accounted for 50% left part of the economically developed cities and regions, the proportion of migrants is higher. In 2005, the proportion of migrants in Beijing was 39.7%, Shanghai was 39.7%, Guangzhou was 47.1%, and Chongqing was 18.5%.

In the tide of urban migrants, there is a large number of low-income laborers, rentable houses that cannot afford urban residents, and no government low-rent housing to live in. One-third of the people choose low-cost, convenient procedures, and loose management. The city village rental house lives. More than half of the rural migrants in Beijing, Shanghai and other cities are renting in the village. Compared with the average urban housing rent, the average rent in a city is only half of that. In some cities, such as Shanghai and Chongqing, the average rent of a house in a city is only about 1/3 of the average rent of a city (National Bureau of Statistics, 2008). The housing in the village is an uncompromising housing rental.

Table 18 urban villages offer low-cost rental housing for the migration population



	All cities in China	Beijing	Shanghai	Guangzhou	Chongqing
Urban migration population	28.6%	39.7%	39.7%	47.1%	18.5%
Migration population who lives in urban villages	20.8%	29.8%	34.6%	22.5%	7.6%
Foreign rural population who lives in urban villages	32.4%	51.7%	56.9%	32.5%	24.7%
Foreign urban population who lives in urban villages	7.9%	13.4%	7.0%	7.4%	2.3%
Migration population in urban villages	25.4%	56.4%	66.7%	40.7%	5.0%
Ratio of average rent in urban villages to average urban rent	50.5%	49.9%	37.8%	54.7%	34.2%

On the other hand, from the perspective of the villagers in the village, the rental of houses does not require the high culture of the people, and does not require hard work. As shown in Table 19 (National Bureau of Statistics, 2008), the migration population plays an important role in the urban villages in China, especially in large cities. Renting a house without operating risks requires a commitment, and it can also obtain a stable long-term high rental income. Therefore, it is an inevitable choice to build a rental house and increase the rental area. Among the population living in urban villages, an average of 25.4% of the population is migrants. However, in some large cities, the number of migrants in the villages exceeds that of local villagers. For example, the proportion of migrants in urban villages is 56.4% in Beijing and 66.7% in Shanghai, both of them higher than 50%.

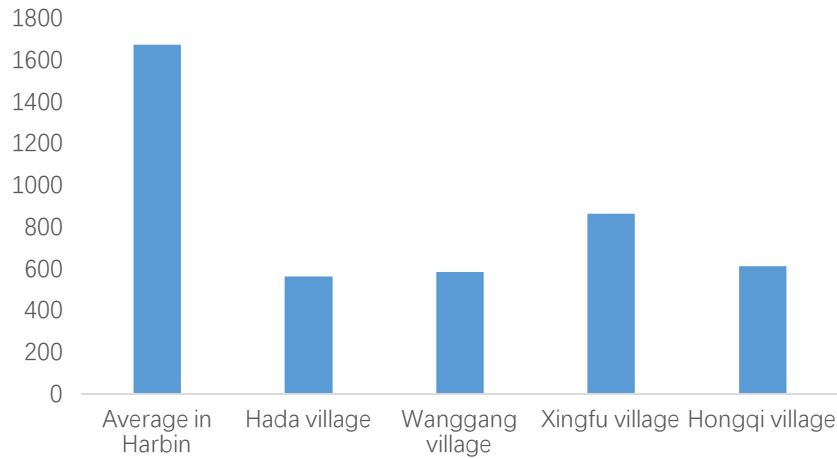


Figure 24 housing rental price in Harbin city and urban villages in Harbin

As shown in Figure 25, the housing rental price in the urban villages in Harbin is obviously lower than the average housing rental price. These data are collected from the housing rental agency (Ganji, 2018). It explains why the migration population prefers to live in the urban village. Fundamentally, the city's housing supply policy does not provide temporary housing for migrants. The city government has so far only focused on the housing needs of local residents, but urban construction and development are inseparable from these large numbers of migrants. The existence of rented houses in urban villages satisfies the housing needs of a large number of migrants, and also solves the employment and life of villagers in urban villages. Therefore, from the perspective of market supply and demand, the urban village rental housing has its rationality.

From the construction of the urban housing security system, it could be clearly understood that:

Firstly, the urban village rental housing provides a large number of the low-cost urban housing;

Secondly, before the urban low-rent housing system has not been perfected, the urban village rental housing still has to play its role in absorbing low-income groups. The thorough demolition and transformation of urban villages may lead to nowhere to live in low-end mobile groups. In particular, large and medium-sized cities that have developed more in recent years must fully consider the consequences of the rhythm of urban village reconstruction.

Thirdly, there are phenomena such as 'dirty messy yellow gambling poison' in the villages in the city, and the sanitation facilities and infrastructure are poor. The rural villages rented by the rural population have a 50% proportion of kitchens and toilets. In the near term, strengthening the management of rented houses in urban villages and improving various facilities should also be part of the urban housing security system. In the long run, the government's low-rent apartments will be the best choice for low-income migrants. It is also the fundamental way to solve the current urban village problem.

#### 5.2.4 Problems exist in the urban village houses

As the living population and governmental policy are different in urban villages than in the city, there are problems in the urban village management and safety in urban villages.

### 5.2.3.1 Urban village houses rental management

- **Lack of government management**

Usually, it is considered that a house lease refers to the act of the lessor providing the house to the lessee, the lessee paying the rent to the lessor and returning the house to the lessor after the lease relationship is terminated. However, the government management of house leasing in actual operation completely obscures the individual behavior. The only thing that can be recognized and protected is the signing of the normative text and the registration of the relevant department to record the lease. It is difficult to obtain relevant rights and interests for a verbal or irregular contract.

Due to the complexity of the management procedures and the wide range of private interests involved, there are a large number of implicit leasing practices, and both parties to the lease need to complete the house lease with a verbal agreement or an informal private contract. Even if the relevant government departments are aware of the specific situation of such behavior, it is difficult to have substantial measures due to the weak management power and the constraints of local conditions. For example, in the late 1990s, the leasing phenomenon showed a blowout situation in various cities and towns in the Pearl River Delta. Public management responded to the situation insufficiently, and the individual leasing was basically outside the public management system, resulting in the informalization of residential leasing for more than ten years.

In the law, the value of low-level law cannot be in conflict with the value of high-level law, and the new law absorbs the principle of the old law. The regulations concerning housing lease management are more complicated. Since 1994, the Ministry of Construction has emerged. The Urban Real Estate Management Law, the Urban Housing Leasing Management Measures and the Urban Housing Leasing Regulations were formulated. The grassroots management departments themselves lack policy capacity and the phenomenon of which laws are often used in the application of laws has led to the principle of law enforcement. In particular, Shuangcheng District and Acheng District of Harbin City do not belong to the main city. In the applicable law, it is the law of Harbin city or the law of Heilongjiang Province, which brings many passive factors to the management work.

- **"legal" for illegal leases**

At present, a large number of rented houses in the urban village in Harbin are illegal buildings, and there is no corresponding law and regulation for the lease contract concluded. In reality, a large part of the village collective and personal income is obtained by renting such illegal buildings. The dividends of the villagers are mainly from collective rental. Then the lease management and legal application of this piece becomes a difficult point that needs comprehensive rectification. The existence of a large number of illegal buildings in urban villages has become an extremely sensitive and thorny historical legacy. The resolution of these problems is extremely difficult: the implementation of full-scale housing will inevitably increase the cost of the house, resulting in high rents to offset the cost, resulting in their weak position in the leasing market; the less formalities of the house, the cost of personal apportionment The lower the number, the more buildings that exceed the requirements of the

urban construction and the national land department, and a large number of buildings that violate the requirements of public security and fire protection. A large number of them entered the housing rental market, which shocked the order of the normal rental market. And because a large number of abnormal procedures are inevitably involved in this process, a relatively stable "illegal" interest community emerges.

- **Weakening of public management**

Although Harbin has a relatively efficient public management system, the city's illegal construction area is large, and the total number of illegal buildings is on the rise. In particular, the stock of permanent illegal buildings is expanding, and some places even grow in geometric progression. The severity and complexity are beyond our imagination, and the climax of illegal construction continues to emerge. Not only villagers and village cadres generally have illegal buildings, but quite a number of grassroots leading cadres, state public officials and other citizens have a large amount of land or houses and factories. Besides, not only the village collectives engage in illegal construction, but also a number of enterprises, institutions and township units illegal building. This weakens the authority of public administration agencies and leads to a large number of uncontrollable consequences, such as the loss of state taxes, illegally profit-making groups with a triad nature, and inhabited communities with serious security risks.

### 5.2.3.2 Safety issues in urban villages

Due to the obvious price advantage, renting a house in a village in the city has become a college student who has just left the school. The houses in the urban village became the "ant tribe" and some migrant workers preferred housing rental. Due to the mixed shortage of villages in the city, it is difficult to supervise. The village rental market in the city can be described as chaotic. It is necessary to be extra careful when renting a house here. On the one hand, many renting traps are surprisingly alarming, and the issue of personal and property safety is particularly prominent. On the other hand, with the acceleration of the transformation of the villages in the city, the houses in the urban villages that are available for selection are gradually decreasing. Some hotspots are starting to pay for the landlords, and the extravagant names are charged. The survival status of the "ant tribe" and the wage earners is becoming more and more difficult.

#### 1. Dedicated to defrauding the deposit

Compared with the residential property, the contract is generally required to be signed for one year. Most of the owners of the villages in the city accept short-term rents. This is also one of the reasons why the "ant family" and the wage earners who are more mobile are welcome. However, precisely because of "short-term rent", many contracts signed between landlords and tenants are not formal, and even some unsigned contracts are only verbal agreements. When renting a house and talking about the good price and the deposit paid, the landlord always has various reasons for not returning it at the time of check-out.

#### 2. Group rented a house smuggled by a thief

Every year in the postgraduate year, several urban villages in Harbin University City ushered in the peak season for renting. In order to have a clean learning environment and to work

overtime after the lights are turned off, many postgraduate students choose to leave the dormitory to rent a room in the city to sprint the postgraduate entrance examination, and these college students who do not have a source of income generally choose a cheap group to rent. A local defense team analyzed that the criminals may be nearby people. They learned about the work schedule of several students through weekday observations, and they find the laptops they placed in the room, when the students leave for their class.

Group renters are very mobile and often have short-term tenants who rent for a few days. The general landlord cannot recognize the tenants in a building, and the security work cannot be discussed. The landlord suggested that if you choose to rent a group to rent, cash and valuable items must be carried with you, do not put in the room. For the postgraduate students who rented a house in the city, experts in the industry pointed out that there were a big fire and burglary hidden danger in the group renting houses, and the sound insulation effect is often poor, which is not conducive to learning. It is recommended that college students choose to rent a single room or rent a regular residence with several students.

### **3. Peak rent increase**

With the further reduction of the number of urban villages available for rent, and the arrival of students who rented houses, many landlords have started to sit on the ground, and “selling up” has made many tenants miserable. On the other hand, there are also landlords who use the method of collecting water and electricity charges to make profits. In response to this situation, experts suggest that it is necessary to sign a formal contract to determine the rental price, whether it is short-term or long-term rent (Shen, 2018). On the other hand, if the water and electricity fee cannot allow both the landlord and the tenant to copy the data at the same time, it should be discussed with the landlord and pay a fixed amount each month to prevent the landlord from using the utility bill to defraud.

## **5.3 Urban village regeneration influences the real estate market**

The regeneration of urban villages is dominated by developers and the government, relying on commercial capital investment. During the regeneration, the old villages are destructed at first, and then a variety of commercial real estate is built. The government implemented supervision, while the village collective participation. There is also a village collective as the main body of transformation. This method adopts self-inviting, investment and operational transformation methods. However, this often requires a higher level of personal qualities and collective economic strength of the village collective leaders, and thus it has not become the mainstream method of urban village reconstruction. In the developer-led transformation method, for the purpose of real estate developers seeking profits, in addition to providing a small amount of “rebuilt housing”, a large number of profitable commercial housing is often built in the relocation area. This will undoubtedly have a non-negligible impact on the local real estate market. At the same time, China's real estate market has been operating at a high level since 1999-2007, and its real estate development investment growth rate is about 20%. This also includes development investment for urban village reconstruction.

This chapter discusses how the urban regeneration influences the housing land supply, housing supply, housing market balance, equilibrium of the market and the housing value will be discussed. How the urban regeneration influences the housing land supply, housing supply, housing market balance and equilibrium of the market will be discussed based on the data of the Harbin estate market. How the urban village regeneration influences the housing value will be discussed based on the case of the Hada village in Harbin. The relationship between the Harbin housing value and housing value in the regenerated Hada village is discussed based on the analysis with bivariate correlations in section 5.2.

### 5.3.1 Urban village regeneration in Harbin Hada village

Hada village is located at 126°32'30" in the east and 43°40'30" in the north. It is located on the southwestern edge of the built-up area of Harbin City. The road from Harbin to Shuangcheng passes through this village; the railway line from Beijing to Harbin is on the north side of this village; and there is a 4-level passenger station. It is also a partial transformation mode adopted in the transformation of Harbin urban village. Hada village is a city-centered village in the easternmost part of Wanggang Town, Nangang District. It belongs to the second-level village. It is located at the intersection of Xuefu Road and Hanan Railway. The south is Harbin South Station, the west is Xuefu Road, and the north can directly reach the clothing. In cities and other places, the bus route is very convenient.

The total population of the village is 22,190, of which 2,480 are permanent agricultural population, 4820 are non-agricultural population, and 14,890 are migrants. Close to the Hada fruit and vegetable wholesale market, it is the main area of Harbin logistics. From the perspective of the logistics market supply, the overall level of logistics enterprises is not high. Many logistics enterprises are still limited to traditional logistics services. The business model, service quality and work efficiency are difficult to meet the growing Logistics needs (B-R, 1991).

Hada Village shoulders the warehousing and shipping functions of some fruits and vegetables in Harbin. The land price of the city is too high, and the warehouse industry with a large area will choose the village in the city with a relatively low transportation cost and low land price. In addition, urban village is also a scattered area of urban functions such as urban residential areas. Because of its location at the intersection of Xuefu Road and Hanan Station, Hada Village has convenient transportation and excellent geographical position. However, due to the small number of people in the local area, the local government promoted the development of village-run enterprises and even the secondary and tertiary industries through investment promotion. In 2009, the output value reached 120 million yuan. The per capita income of farmers has reached 6,000 yuan, and the per capita living area is more than 100 square meters, of which 80% is a two-story building. The so-called grass house has become a history of dust-proofing, fixed-line homes, and average Each home has more than two mobile phones. There are 21 village-run enterprises and 32 private enterprises in the village. There are hundreds of other shops such as hotels, medical stores, baths, restaurants and grocery stores. It is no different from other urban villages. Hada Village is also a low-rise building surrounded by high-rise buildings. There is not much land in the area. The village is a typical village-level economy with many people and land, mainly industrial and secondary and tertiary industries. There are 21 village-



run enterprises and 32 private enterprises in the village. There are hundreds of other shops such as hotels, medical stores, baths, restaurants and grocery stores. The existence of the village in the city is the result of urban development. There are many characteristics of the city, but there is no obvious functional division. The functional areas are mixed. The housing accounts for most of the land. A market distributed in the village includes catering and bathing, pharmacies, shoe repair, postal, communication, photo studio, beauty salon, clothing store, shroud wreath shop, mobile phone shop and other services. Many of the migrants in the village mainly work as temporary workers or wholesale fruit in the Hada Fruit and Vegetable Wholesale Market. It reflects the composition of the labor force in the region, but from the perspective of urban villages, it is concluded that most of the economic types are dominated by labor-intensive industries, and many are tertiary industries (mainly in the service industry), which is the normal operation of the city. Guarantee to the industry. Entering the Hada Fruit and Vegetable Wholesale Market, it is the large and small, various vehicles that transport fruits and vegetables. There are many porters who carry goods, many of whom are temporary workers here. The goods are mainly used to supply the demand of Harbin City. I saw many cargo trucks pushing the car, and there are some retail stalls on the roadside. Next to the fruit and vegetable wholesale market, there are Hada Seafood Wholesale Market, Hada Grain and Oil Wholesale Market, etc., and the main non-staple food supply base has been formed here.

The village has a total area of 0.2 square kilometer of cultivated land, 80% of which are greenhouses and greenhouses. The land of the villages includes cultivated land, house sites, and land used for economic development. The population of the village is partly villagers and residents. Although they are villagers, they basically have no land. The village is a village-level economy with a typical population and a small number of people, mainly industrial and secondary and tertiary industries.

In the villages of the city, many such illegally built houses are used for rent. The signs for rent are everywhere here and can be seen everywhere. Some villagers from other places planted greenhouses on rented land and built low-rise houses. In the middle of the village of Hada, a park is being built, the lawn is planted, and trees are planted in the area where the original river channel is located in the north of the park. Pictures for the Hada village before and after regeneration are shown in Figure 26 and Figure 27.

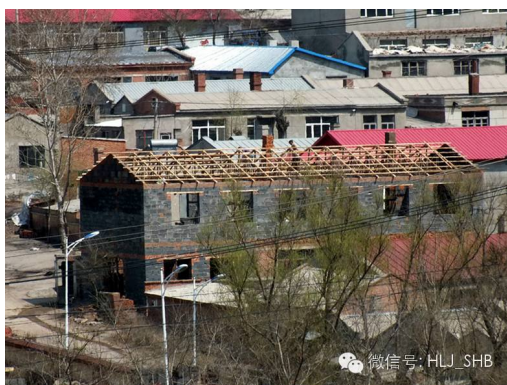




Figure 25 Hada village before urban village regeneration



Figure 26 Hada village after 2014

As shown in Figure 26 and Figure 27, the regeneration of Hada village is quite easy to see. One of the pictures in Figure 26 is taken by a residence in 2014. Other pictures in figure 27 are collected from google map (pictures were taken in 2018).

### 5.3.2 Urban village regeneration influences the housing land supply

Urban village regeneration increased the supply of residential land. Since 2004, the Chinese government strengthened the regulation of the land supply mode and the supply structure of the real estate market. The increasingly strict land policy has enabled developers to continually



seek new ways to acquire land use rights. The transformation of the village in the city provided an opportunity for it. It has increased market supply in the face of an increasingly tight supply in the land market.

In the year of 2017, Harbin City implemented the new strategy of “Northern, Southern, Zhongxing and Qiangxian”, and listed the transformation of shantytowns as an important part of the “Zhongxing” strategy, actively expanding the scope of the shed to benefit the people, and it is extended to the expressway around the city. It is planned to complete the transformation of the shanty town of 11.34 million square meters within the Ring Expressway in three years.

Based on the statistics of the Harbin Land Planning Department, this year, the city has identified 56 shed reform projects, mainly involving Daoli, Daowai, Xiangfang, Nangang, Songbei, and Pingfang. It is worth noting that many projects are in the Second Ring Road. In addition, some are already near the Fourth Ring Road. If the Daoli District is not far from the Airport Road, the kiln street shed renovation project is within the Third Ring Road, but it is close to the city side; the Baijiabao shed renovation project in Nangang District is also outside the Second Ring Road, and the beneficiary households have been fully expanded.

At the same time, Harbin city promised to the provincial government to complete the demolition and rebuilding of 3.45 million square meters this year, and start construction of 4.65 million square meters of sheds to ensure that 10,000 sheds change residents to live in new homes. Up to now, the shanty town renovation work has completed 3.077 million square meters of demolition, accounting for 89.1% of the annual plan; the number of relocated households is 24,192; the construction of construction is 5,495,300 square meters, 118% of the annual plan, of which the scale of relocated houses is 2,241,600 square meters. At the same time, in 2017, Harbin City has also started five shed-converting resettlement projects including Qunxi West District, Ceramic Community and Nangang Haxi New District. The planned total construction scale is 6,083,600 square meters, and it is planned to complete 600,000 square meters during the year. (Juanshan, Zhang, 2017)

According to reports from the Harbin Land Planning Department, this year's shantytown reconstruction task has been included in the three key projects of Harbin urban construction. Many of the newly added shed reform projects are coordinated with key projects such as roads and bridges, subways, railways, and Chinese Baroque reconstruction. In order to do a good job in this project of benefiting the people and the people's heart, the Harbin Municipal Party Committee and the Municipal Government must ensure that all preparatory work is done before the start of the project, and that the project will start in the spring of the year, and that the project will be completed in the same year. Residents will move back soon. The relevant staff of the Harbin City shed changed the office, and it was necessary to grab the early start of the demolition and start a new record in Harbin. For example, in the protection of the Chinese Baroque historical and cultural blocks, the city of Harbin broke the historical practice of not relocating in the first month, and started the demolition in the first month of the 16th month.

### 5.3.3 Urban village regeneration influences the housing supply

Urban village regeneration increases supply of commodity housing. According to the data of Wuhan Real Estate Transaction Information Center, new commodity houses from the urban

village regeneration are provided every year. This data since 2008 is collected, as shown in the Figure 28 below. In 2008, there are not a lot of new regeneration areas. The urban village area in Harbin provided 523 suites to the estate market. With the continuous progress of the transformation process, the number of provided suites in 2010 increased 57.4 compared 2008. With the regeneration keeps going, until 2017, 16439 sets of houses in urban villages started to regenerate. (Among them, 7084 sets of city-level, 9355 sets of Hulan, Acheng and Shixian (cities)), 36,527 sets has been completed (including 25,251 sets of city-level, Hulan, Acheng and 11276 sets of ten counties (cities)); (Harbin Housing and Urban-Rural Development Office, 2017)

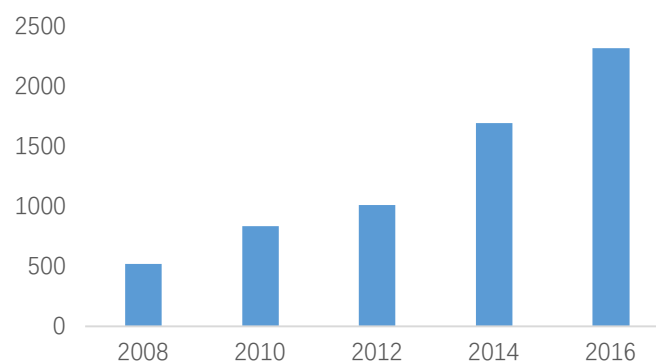


Figure 27 number of houses provided by the urban village regeneration

In the process of urban village regeneration, in addition to providing commercial housing to the society, developers will provide more than two sets of “renovation houses” to each villager. In the visits of many village residents, the reporters found that although “rebuilding houses” are not allowed to trade in the market for a certain period of time, they are cheaper than the commercial houses with complete documents, and these houses are within 3-5 years. In the end, a full set of title certificates can be obtained, so the phenomenon of private transactions is not uncommon. From this point of view, the construction of houses that have not been publicly traded in the short term has also increased the supply of the entire real estate market to some extent.

#### 5.3.4 Urban village regeneration influences the housing market demand

During the urban village regeneration process, there is little impact on local real estate demand. The group most affected by the transformation of urban villages is the villagers in the villages and the low- and middle-income people living or renting them. There are three kinds of compensation methods for requisitioning villagers' homesteads in the urban village: monetary compensation, physical compensation, and house resettlement compensation (Haiyun & Lijun, 2008). In the actual operation process, the physical compensation method of “demolition and one-off” is often adopted. Therefore, there is little impact on local real estate demand. During the visit to the urban village Tenant in Hada District, when asked about the future plans of the urban village after the transformation, part of it stated that it would consider working in other cities, and the other part would continue to stay in Harbin, but it would seek to rent in other urban villages. Staying, it is rare to rent a house near the village in the city. Therefore, the impact of the sharp increase in rents due to the renovation on demand for rental housing is

unfavorable. However, due to the limited purchasing power of this group of residents, in fact, the impact on the real estate market demand in the region is not significant.

#### 5.3.5 Urban village regeneration influences the equilibrium of market supply structure

Therefore, it is easy to increase the supply of middle and high-end housing in the market with the introduction of developers' operating methods in the urban village reconstruction. In a short period, the continuous introduction of developers to carry out large-scale urban village reconstruction will stimulate the exacerbation of the housing prices in the real estate supply market, the oversupply of middle-to-high-end housing, and the severe shortage of low-end rental housing.

In countries with a higher degree of marketization in Europe and the United States, the “filtering” phenomenon of residents is widespread. The housing market can adjust the supply structure of the real estate market through changes in prices and demand. The mechanism of action of this theory is that homes initially built for higher income classes will age over time, and the increase in the supply of new homes will often cause home prices to fall. At this time, the higher income class is pursuing better living conditions, will abandon existing homes and purchase new homes, while the lower income class continues to use the home. The large-scale transformation of urban villages in China has increased the supply of ever-increasing middle- and high-end commodity housing beyond market demand, and the residential years on the secondary market are still short. On the other hand, the housing prices in the new commodity housing market have remained at a high level. Prices in the secondary market are also generally higher. The “filter” mechanism fails in this case. Therefore, the unbalanced supply structure of the real estate market caused by the transformation of the village in the city cannot be solved by the market itself through the “filtering” mechanism, and it needs the effective regulation of the government. Its core lies in controlling the progress of the transformation of the village in the city and the types of commercial housing.

#### 5.3.6 Urban village regeneration influences the housing value

The impact of the urban village regeneration on the total supply and structure of the regional real estate market is also reflected in the fluctuation of housing prices. In previous studies of other cities in China, house price after the renovation of the village was strongly related to the local market price. (Shuang & Xin, *An Empirical Analysis of the Influence of Urban Village Reconstruction on Real Estate Market—Taking Hanyang District of Wuhan as an Example*, 2009) In this chapter, the relation between local market price and the renovation of urban villages in Harbin is discussed. The data of urban village average price, the Harbin housing price, the number of commercial housing in the Hada urban village, and the number of commercial housing in Harbin from 2008 to 2018 is collected from the housing agency. (Anjuko, 2018) (Zhugezhaofang, 2018) (Fangtianxia, 2018)

An analysis with bivariate correlations was performed to analyze the quantity and average price of commercial housing provided by Hada village housing market and urban village reconstruction in the year of 2004 to 2018. The results of the analysis are presented in Table 20.

Table 19 Pearson Correlation

		urban village average price	Harbin housing price	number of commercial housing in the Hada urban village	number of commercial housing in Harbin
Urban village average price	Pearson Correlation	1	.925**	.859*	0.53
	Sig. (2-tailed)		0.003	0.028	0.279
	N	7	7	6	6
Harbin housing price	Pearson Correlation	.925**	1	.872*	0.472
	Sig. (2-tailed)	0.003		0.023	0.345
	N	7	7	6	6
number of commercial housing in the Hada urban village	Pearson Correlation	.859*	.872*	1	.833*
	Sig. (2-tailed)	0.028	0.023		0.04
	N	6	6	6	6
number of commercial housing in Harbin	Pearson Correlation	0.53	0.472	.833*	1
	Sig. (2-tailed)	0.279	0.345	0.04	
	N	6	6	6	6

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

As shown in Table 20, significant Pearson correlations found among these four variables: urban village average price, Harbin housing price number of commercial, housing in the Hada urban village, and the number of commercial housing in Harbin. Among them, urban village average price and Harbin housing price number of commercial (R=0.925, p=0.003, N=7) at the level of 0.01, significant positive correlation, and number of commercial housing in the Hada urban village (R=0.859, p=0.023) At a level of 0.05, there was a significant positive correlation, and

the number of commercial housing in Harbin ( $R=0.53$ ,  $p=0.279$ ) failed to pass the significance test. Harbin housing price and the number of commercial housing in the Hada urban village ( $R=0.872$ ,  $p=0.023$ ) were significantly positively correlated at the level of 0.05, and the number of commercial housing in Harbin ( $R=0.472$ ,  $p=0.345$ ) failed. Pass the significance test. The number of commercial housing in the Hada urban was significantly positively correlated with the number of commercial housing in Harbin ( $R=0.833$ ,  $p=0.04$ ) at a level of 0.05.

As shown in the testing result:

- The housing price in the regenerated Hada village influences the Harbin average housing price;
- The number of selling houses in the regenerated Hada village influences the total number of selling houses in Harbin.

## 5.4 Summary

In chapter 5, the influence of the urban villages and urban village regeneration on the housing market was discussed. The effect on the estate market is considered as the representative element for the economic influence, as the most visible economic influence of the urban village is on the housing market, and it is also the most popular trending topic.

Before regeneration, the living environment of the urban villages in Harbin is not as good as other urban areas. The housing price is lower when this house is close to the urban village. The rental houses in urban villages are mostly for the migration population. These houses locate close to the city at a lower price; however, there are many problems in the housing rental process in the urban village.

The influence of urban villages keeps changing during the process of the urban village development. The regenerated urban villages also influence the housing market. They offer more housing and housing land for the estate market. However, the large-scale urban village reconstruction by the developer will stimulate the exacerbation of the housing prices in the real estate supply market, which needs the government control to keep the balance. Besides, these regenerated urban villages affect the housing value and the number of commercial houses in the Harbin estate market.

## 6. Stakeholder involvement in the urban village development process in Harbin

Urban village is regarded by the government and developers as the most important area for urban land development and utilization. In the process of urban village development, there are many contradictions in the existence of interests in the village. The contradictions and conflicts in the village are complex. There are not only external contradictions but also internal contradictions. The main contradictions are: There is a contradiction between the villagers and the developers, such as the volume ratio problem. For developers, the volume ratio determines the proportion of the cost that developers pay in the housing. For the user, the volume rate directly affects the comfort of the resident environment. For a good residential community, the floor area ratio of high-rise residential buildings does not exceed 5, and when the rate of multi-story residential buildings does not exceed 2, and the green space rate is not less than 30%, it meets the environmental requirements of residents for healthy living (Commission, 2014). The root of contradictions and conflicts is the issue of interests.

These contradictions and conflicts have an influence on the relationship between the government and people. They also cause some community behavior, such as population migration, some social issues, such as nail households, and some social conflicts.

In this research, the main stakeholders involved in the urban village development process are analyzed and discussed, including the government, villagers, developers, tenants who live in the urban village, operators who have their business in the urban village, NPC (National People's Congress) deputies who represent the rights of people, village stock company who manage village collective assets, and social media who reflect the unfair and unreasonable treatment to the villagers to the public.

In this chapter, how the urban villages and their regeneration in Harbin influence the relationship among the stakeholders will be discussed. In section 6.1, the operation model in Harbin is introduced to give a basic idea of the stakeholder relationship. In section 6.2, the views from different roles in the urban village and urban village regeneration are collected to have an idea of the interest and power of these roles. Besides, to have a comprehensive understanding of the bigger picture, some of the views are proposed by the roles that are not stakeholders, such as the scholars. In section 6.3, the relationships between the main stakeholders is analyzed in different phases of the urban village development (from gestation to disappearance). Based on the stakeholders' interaction, corresponding social influence is discussed. In the end, a summary is given.

### 6.1 Stakeholder identification and analysis

The transformation of the urban village is a comprehensive systematic project that directly or indirectly involves the interests of various groups of people. The problem of the urban village has also been widely concerned by the society. The views and understandings of various people on this issue will more or less affect the smooth progress of the urban village transformation.

Although the opinions and opinions of various parties are relatively fragmented, they may not be comprehensive and comprehensive, but they can reflect the understanding and views of all sectors of society on the transformation of the urban village.

The opinions from different stakeholders, including government officials, NPC (National People's Congress) deputy, experts and scholars, villagers, stock company, and tenant and operators are collected from the newspaper and forum (people.cn, 2018; leju, 2018; Harbin tieba, 2018). The responsibility, power, and interests of these roles can be seen based on their views. The collected views can be found in Appendix I.

As shown in Table 21, different roles pertain to different perspectives of view. Based on the stakeholders' statement, their interest during the urban village development can be observed.

*Table 20 perspective of different roles in the urban village and urban village regeneration*

Roles	Comments
government officials	<ul style="list-style-type: none"> <li>• Government officials considered urban villages as one important element for the development of the city.</li> <li>• Some of the government officials indicate that urban village regeneration processes should be implemented fast, while some of the officials say that the implementation of the urban village regeneration should be taken slowly. However, there is an agreement that the regeneration has to be well designed and consider different stakeholders in the process.</li> </ul>
NPC deputies	<ul style="list-style-type: none"> <li>• The studies of urban village and urban village regeneration are both important. The attention on the urban village management and urban village regeneration should be distributed equally.</li> <li>• The NPC (National People's Congress) deputies are standing from the perspective of the people. They hope the urban village government and the regeneration process can fully consider the interest of the people.</li> </ul>
experts and scholars	<ul style="list-style-type: none"> <li>• The urban village formation is caused by the government's insufficient understanding of the village. Government should pay more attention to the urban village management.</li> <li>• Property rights, compensation for demolition, and the multi-stakeholder management, etc. are essential to the urban village regeneration.</li> </ul>
stock company	<ul style="list-style-type: none"> <li>• The stock company<sup>2</sup> is responsible for the urban village regeneration. It may earn money from the regeneration and it also needs to work for the compensation of the regeneration.</li> </ul>

<sup>2</sup> The stock cooperation system is used in the Chinese rural communities to solve the problem of efficiency and fairness brought about by the distribution of land income and

	<ul style="list-style-type: none"> <li>• The stock company knows how to compensate the villagers and what the villagers want in cash and real estate aspect.</li> </ul>
villagers	<ul style="list-style-type: none"> <li>• Villagers live in the urban village. They have feelings for the village in which they live.</li> <li>• The urban village regeneration has huge impact on their life. They want to get the biggest economic advantage, such as high property compensation, higher income, higher value of their houses.</li> </ul>
tenants and operators	<ul style="list-style-type: none"> <li>• Tenants and operators living and working in urban villages has pros and cons. The advantage could be the living cost is low, while the disadvantage could be the security issue.</li> <li>• Tenants and operators do not want the urban villages to be regenerated, because else they have no where to live.</li> </ul>

As shown in Table 21, before the regeneration, the main stakeholders involved in the urban village management are government officials, NPC deputies, experts and scholars, villages, and tenants and operators. The stock companies are only involved in the urban village regeneration process. For the urban village regeneration process, all the stakeholders above are involved, with different interest. How these stakeholders work collaboratively is discussed in the next section.

## 6.2 Stakeholder relationships in different phases of the urban village development

The urban village development goes through several stages. In each stage, different stakeholders play different roles.

### 6.2.1 First phase: the gestation stage

The first stage is the stage of settlement formation (traditional rural settlements). It can also be called the “pre-city village” stage. At this time, the city has expanded to the villages and towns. The villages in the city are only simple rural settlements, mainly based on agriculture, with economic backwardness and low incomes for farmers. The main function of villages and towns is that the peasants live in settlements or rural centers, and the social organizations have obvious characteristics of traditional feudal patriarchal laws.

In this phase, the main stakeholders are the villagers. There might be some tenants living in this area, but there is no clear cooperation or confliction between the tenants and the villagers. In

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the disputes over collective property rights in rural communities. At present, the urban village regeneration model based on the stock company has been widely promoted and applied in the urban villages in China.



this phase, the government has not started the urban development plan in this area. These villages are still managed as the normal village.

### 6.2.1.1 Stakeholder Analysis

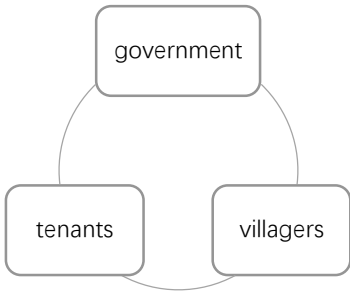
Table 21 stakeholder analysis in the gestation stage of the urban village

Stakeholders	Power	Interest
<b>Villagers</b>	<ul style="list-style-type: none"> <li>• The villages still maintain the characteristics of the rural area in China. The land ownership in the villages belongs to village collective, which means that the villagers basically have the ownership of the land.</li> <li>• Villagers can also rent their place or house to the outsiders to earn money, while keeping the ownership at the same time.</li> </ul>	<ul style="list-style-type: none"> <li>• The main interest of the villagers is related to the price of the land, houses, and products. Villagers want to see the increasing value of their land and their houses. At the same time, they prefer to keep the low living cost.</li> <li>• The living environment is also important for the villagers. Convenient and comfortable environment is preferred.</li> </ul>
<b>Tenant</b>	<ul style="list-style-type: none"> <li>• There are not many tenants and operators in the villages. They can choose the place they want to live. However, they almost do not have additional power as tenants and operators. They cannot control the housing value, and the living cost. They don't have the ownership of the land and the house neither. The landlord only need short-term notification to evict them.</li> </ul>	<ul style="list-style-type: none"> <li>• The tenants live in the village. The rental price of the houses in the village and the consumption price influence their lives. They prefer to have low living cost.</li> <li>• Like the villagers, they also prefer the convenient and comfortable living environment.</li> </ul>
<b>Government</b>	<ul style="list-style-type: none"> <li>• In traditional rural communities, the main subjects of village-level governance are township governments, village party organizations, village self-governing organizations and rural residents.</li> <li>• The government officials cannot change the value of the</li> </ul>	<ul style="list-style-type: none"> <li>• The government officials want to promote social stability, improve government prestige and fiscal revenue.</li> </ul>

	land and the house in the village. They can only macro-control the housing value in a broader area.	
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As shown in Table 22, in the gestation stage of the urban village, the main stakeholders are the government officials, the villagers, the tenants and the operators. The village-level governments' responsibility is to give the villagers a better life. Their interest includes the social stability and also economic benefits. The villagers own the land and the houses. They earn money from farming and renting houses (which is not a large amount in this case). They want to live in a better community and earn more money. The tenants and the operators do not have much power. Their interest is also a better life like the villagers. Besides this, they prefer a lower renting cost.

**6.2.1.2 Relationship analysis**



*Figure 28 stakeholder relationship in the gestation stage*

In the gestation stage of the urban village, three stakeholders are involved and collaborate with each other, as shown in Figure 29. The collaboration between these three stakeholders is not very strong. The government officials are responsible for the nice living situation of the villagers and the tenants. They also need to consider the profit of the government. In this case, the gain is mainly related to the farming situation. The villagers have the ownership of the land and the house. However, there is a clear hierarchy between the government and the villagers. The villagers are relatively weak in this relationship. There is the NPC Standing Committee to represent the rights of the people, but it is not helpful in the village level (Junfu, 2004). Regarding the relationship between the villagers and the tenants (including operators in the village), the villagers offer housing for the tenants, and the rent from the tenants are one income sources of the villagers.

**6.2.1.3 Social influence**

Before regeneration, urban villages have relatively low development. Villagers, tenants, and operators have low income. The housing environment is poor, and the traffic is not developed. Some of the villagers in the village do not work. It is easy to live a good life only by renting rents and the collective economic dividends in the village, breeding a leisurely, but a money-

only lifestyle. In the village, because law and order are not in place, some people say that in recent years, they do not know how many bicycles have been lost. Some people have said that they cannot walk alone at night, and there are many drunks. Also, due to the low rent and weak management of the houses in the city and the surrounding cities, it is likely to attract some people engaged in illegal activities, such as illegal casinos, illegal debt collection, illegal detention, extortion, etc. Therefore, the village in the city becomes the city. In crime-prone areas, crimes are increasingly rampant, which not only affects local social security issues but also affects the city's social environment and affects the city's social and economic development (Guikai & Junwei, 2009).

### 6.2.2 Second phase: the formation stage

The second stage is the urban-rural integration stage (urban-rural contact). With the expansion of urban land use, agricultural land such as cultivated land, fish ponds and orchards in surrounding villages and towns has gradually been requisitioned by cities, and developed into urban residential areas, industrial areas, urban and rural land, and urban infrastructure such as water supply, power supply, gas, and roads. With the city expanding to the countryside, farmland breeding income is replaced by urban-level differential rent income. Industry and commerce have gradually become the main source of economic resources in urban villages. More and more villagers have turned to non-agricultural activities, and the living space of farmers has gradually contracted into narrow settlements (Haiyun & Lijun, 2008).

In this stage, the government starts to plan the urban village regeneration. The regeneration is in the beginning phase. Some of the renovation areas has been decided, while the detail of the renovation project has not been settled. For the future regeneration area, the villagers live there will be informed to move in a short period. The corresponding compensation will also be given. The compensation content is decided by the government and the developers.

*Table 22 stakeholder analysis in the formation stage*

Stakeholders	Power	Interest
Villagers	<ul style="list-style-type: none"> <li>The villages still maintain the characteristics of the rural area in China. The land ownership in the villages still pertains to the village collective.</li> <li>Villagers can rent their place or house to the outsiders to earn money, while keeping the ownership at the same time.</li> <li>For the villagers live in the regenerated area, the power is lower than the government, as can be seen from the short-term eviction notice.</li> </ul>	<ul style="list-style-type: none"> <li>The living environment is still important for the villagers. Convenient and comfortable environment is preferred.</li> <li>For the villagers who live in the not regeneration area, the main interest is still just the price of the land, houses, and products. Villagers would like to see the increasing value of their land and their houses. At the same time, they prefer to keep the low living cost. Besides with the urban development, the living cost keeps increasing.</li> </ul>

		<ul style="list-style-type: none"> <li>• For the villagers who live in the regeneration area, their interest includes how they will be relocated and how much compensation they could get.</li> </ul>
<b>Tenants and operators</b>	<ul style="list-style-type: none"> <li>• With the urban development, the villages are getting closer and closer to the city, which means that there are more and more tenants and operators in the villages. They can choose the place they want to live. However, they almost do not have additional power as tenants and operators. They cannot control the housing value, and the living cost. They do not have the ownership of the land and the house neither. The landlord only needs short-term notification to evict them. For the tenants and operators in the regenerated area, they will be informed to leave.</li> </ul>	<ul style="list-style-type: none"> <li>• The tenants who live in the village. The rental price of the houses in the village and the consumption price influence their lives. They prefer to have low living cost.</li> <li>• Like the villagers, they also prefer the convenient and comfortable living environment.</li> <li>• For the tenants who live in the regeneration area, they have to find a new place to live. The relocation and the situation of their new living place are also their interest.</li> </ul>
<b>Government</b>	<ul style="list-style-type: none"> <li>• The village-level government officials have the power to decide the location of the regeneration and the compensation for the villagers.</li> <li>• Government has more power than the other stakeholders in the urban village regeneration project.</li> </ul>	<ul style="list-style-type: none"> <li>• The government officials want to promote social stability, improve government prestige and fiscal revenue.</li> <li>• They want to earn more profit from the regeneration. They also want to give the people a better life.</li> </ul>
<b>Developers</b>	<ul style="list-style-type: none"> <li>• The developers are responsible for the regeneration project. They can negotiate with the government about the regeneration plan.</li> <li>• Their responsibility includes developing the overall investment development and operation plan of the project to help the government achieve</li> </ul>	<ul style="list-style-type: none"> <li>• The developers earn more benefit from the regeneration project. They acquire reasonable development profit. At the same time, they improve the company's brand, and gain development experience.</li> </ul>

	<p>more social goals and maximize the value of the land.</p> <ul style="list-style-type: none"> <li>• They get project development rights and government funding support. They implement the terms of the cooperation agreement with the government and enjoy the preferential policies of each project.</li> </ul>	
NPC deputy	<ul style="list-style-type: none"> <li>• The NPC deputy represents the right of the people. They have certain amount of influence on the government's decision.</li> </ul>	<ul style="list-style-type: none"> <li>• The NPC deputy wants the people to have a better life. They want the villagers to get more compensation and better life. At the same time, they also care about the arrangement of the tenants and the operators, such as the compensation to the tenants and the operators, the relocation of them, etc.</li> </ul>

As shown in Table 23, in the formation stage of the urban village, the urban area has expanded to the villages. The government has started the regeneration project. The government decides the content of the regeneration project, which means it has higher power in this phase. The villagers and the tenants will be short notified for the relocation, which may cause discontent. The developers and stock companies are also involved in this stage. They are responsible for the regeneration, while their interest is their profit from this project. The NPC deputies strive for more rights and benefits for the villagers and the tenants.

### 6.2.2.1 Relationship Analysis

The primary stakeholders are the government and the villagers in the formation stage. The discussions between the villagers and the government include land ownership, medical insurance, changes in resident status, children's schooling problems, compensation for resettlement. The secondary stakeholders are the tenants and the developers. The tenants might be informed to move because of the regeneration, but they are not strongly related in this project. In general, the developers have not dominated the project yet in this phase. They only talk to the government, not the villagers and the tenants. The broader environment stakeholders are the NPC deputies. They represent the right of the villagers and the tenants, but their involvement in this project is quite limited.

In this stage, the stakeholder relationships are tumultuous, but it is also this stage when the collaboration framework between the stakeholders is built. Therefore, intense discussions and issues are happening in the formation stage of the urban village.

Based on the situation in this stage, the stakeholder relationship is described in Figure 30. In this figure, the straight line represents the strong relationship, which means high-frequency interaction and high interdependence of resources. The dashed line represents the low-frequency interaction and low interdependence.

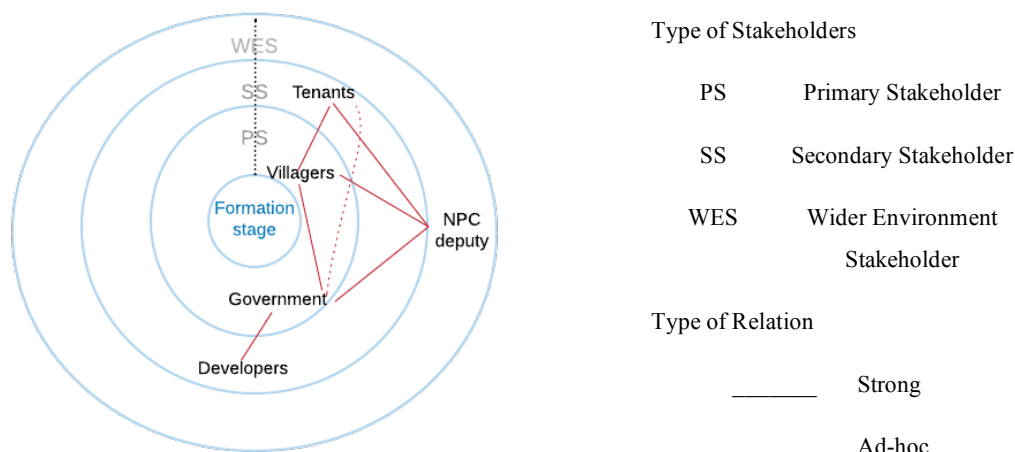


Figure 29 stakeholder relationship in the formation stage

As shown in Figure 30, there are more stakeholders involved in the formation stage than in the gestation stage. Most of the relationships are strong, while the relationship between the tenants and the government is relatively low. The tenants will be informed to leave during the regeneration, but not directly by the government. At the same time, tenants as the citizens are still responsibilities of the government.

#### 6.2.2.2 Social Influence

1. The relationship between the government and people

In the formation stage of the urban village, the relationship between the government and the villagers plays an important role.

China's long-term urban-rural dual management system and rental housing income and other systems. The local interests of these villages are the roots of the urban villages. The rural collective ownership system and the housing estate policy are the fundamental reasons for the complicated problems in the process of the urban village.

As a substantial land property owner, the government naturally realizes the land ownership interest in the development process. The government must solve the problem of the urban village and maintain the stable development of society. The villagers and village collectives act as the nominal land property owners and land users. They demanded the realization of short-term and long-term benefits after the transfer of land use rights. While eager to improve their living environment, they are worried that the vested interests such as the source of income they receive from renting houses will not be protected in the transformation, and they will lose the

income of the one-time buyout of the land generated by the collectively retained land or the land. The differential income brought about by a large appreciation will inevitably lead to a vested interest. Therefore, the compensation of the ownership and vested interests of land property rights has become the key to the game between the government and the owners in the process of the urban village.

## 2. Large-scale displacement of migrant tenants

At the beginning of the regeneration, villagers will be informed about their relocation. Therefore, they will inform the tenants to relocate. The migrant tenants in the urban villages are basically “ant tribes.” As discussed in section 3.4, these floating populations do not have a high income. The regeneration will cause them losing their living places.

To help those who used to live in the urban villages, the Harbin government provides low-rent housing since 2015. As mentioned by the housing security and real estate management work conference in Harbin, for the residents of the renovated urban village, plans to start construction of 21,185 sets of affordable housing projects, and will also explore the establishment of a “two-bedroom integration” system for public rental housing and low-rent housing (Li & Liu, 2018).

## 3. Serious disputes

Negative social influences are created during the discussions about the demolition compensation. As discussed in Section 3.4, the rural land value is unmeasurable, which means that the compensation value is hard to decide. If the compensation to the villagers is not arranged properly, there will be serious disputes to the government among the villagers.

### 6.2.3 Third phase: the development stage

The third stage is the village in the middle of the village (urban-rural conflict). At this time, almost all of the cultivated land in the villages and towns was requisitioned by the city, leaving only the villages and towns surrounded by the urban built-up areas. At this stage, a typical urban village was formed. The original farmland has become a built-up area. The original farmers have not farmed, but the peasant status is still peasant status (in the sense of Hukou only), and no simultaneous urbanization has been achieved. Administratively, the villages in the city are also villages and towns, with little or no agricultural income. Villagers in urban village rely entirely on land transfer compensation fees and leased self-operated properties. Most of the self-employed industries are bankrupt. The security of the village in the city has deteriorated. At this time, the conflicts in construction and social culture between the urban village and the city have become increasingly apparent.

In this phase, the regeneration goes one step further than in the formation stage.

*Table 23 stakeholder analysis in the development stage of the urban village*

Stakeholders	Power	Interest
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<b>Villagers</b>	<ul style="list-style-type: none"> <li>• The villages still maintain the characteristics of the rural area in China.</li> <li>• The villagers can negotiate with the government and the developer, as they have the ownership of the land.</li> </ul>	<ul style="list-style-type: none"> <li>• The villagers' interest includes how they will be relocated and how much compensation they could get.</li> </ul>
<b>Tenant</b>	<ul style="list-style-type: none"> <li>• Tenants do not have power in the regeneration project. They have to move out when the house owner ask them to leave.</li> </ul>	<ul style="list-style-type: none"> <li>• Tenants want to keep their living and rental cost low. They also want to have nice living situation.</li> </ul>
<b>Government</b>	<ul style="list-style-type: none"> <li>• Government transfer some of their power to the developers, such as the real construction and the compensation work</li> </ul>	<ul style="list-style-type: none"> <li>• Government want to see that people can live a nice and comfortable life. At the same time, they still care about the profit and consumption of the regeneration project.</li> </ul>
<b>Developers</b>	<ul style="list-style-type: none"> <li>• Developers get more power in the regeneration project from the government. They can negotiate with the government about the extent of their involvement.</li> </ul>	<ul style="list-style-type: none"> <li>• With the villagers: developers want to give less compensation; pay less for the construction.</li> <li>• With the government: developers want to have more funding from the government.</li> <li>• At the same time, developers also care about the company's brand, development experience.</li> </ul>
<b>Stock company</b>	<ul style="list-style-type: none"> <li>• The stock companies assist the government to do the compensation and resettlement work for demolition. They have to comfort the villagers' emotion and resolve conflicts between the government and the villagers.</li> <li>• They have the right to know and participate in the transformation plan represents the villagers' supervision of the project transformation, especially the construction of the house.</li> </ul>	<ul style="list-style-type: none"> <li>• The development of the company's economy and the acquisition of business benefits beyond expectations.</li> </ul>



NPC deputy	<ul style="list-style-type: none"> <li>The NPC deputy represents the right of the people. They have certain amount of influence on the government's decision.</li> </ul>	<ul style="list-style-type: none"> <li>The NPC deputy wants people to have a better life. They want villagers to get more compensation and better life. At the same time, they also want the tenants and the operators could be arranged properly.</li> </ul>
Media	<ul style="list-style-type: none"> <li>The social media plays the role of the supervision in the regeneration project. They can reflect the problems and unfairness in the urban villages and their development project</li> </ul>	<ul style="list-style-type: none"> <li>The social media want to see the social equality.</li> <li>The profit and attention could also be their interest.</li> </ul>

In this stage, more stakeholders are involved in the project. Social media is also considered in the development stage. When the regeneration project goes further, more social issues and more confliction between the villagers and the government (between the villagers and the operators) show up. Social media reflect these issues and conflictions to the society, which will influence the regeneration indirectly. The village stock companies are also considered. They are responsible for assisting the government in the compensation and resettlement of demolition. They hope that the company's economy will develop and gain more than expected business benefits. However, for the mature urban village in Harbin, due to its high volume ratio, high commercial value and the complete community relationship formed between the villagers, it is difficult to transform the urban villages in Harbin and enhance the commercial value of the district.

### 6.2.3.1 Relationship Analysis

The developers compete with local governments by choosing to intervene or not to innovate, forcing the government to provide more benefits. The social media is considered as one wider environment stakeholder, because they cannot influence the regeneration and the urban village directly.

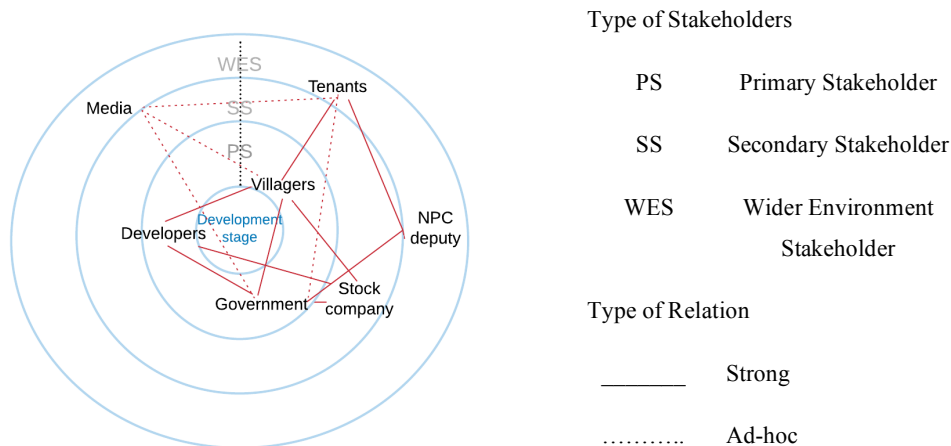


Figure 30 stakeholder relationship analysis in the development stage

### 6.2.3.2 Social influence

#### 1. Relationship between government and developers

By transforming the urban village, the government can obtain rich land resources and an increase in fiscal revenue brought about by the improvement of land prices after the renovation. Moreover, the government can further solve social problems such as public security and environmental protection and optimize the urban spatial structure. Therefore, in order to obtain a good urban development environment and to avoid the excessive supply of housing and impact the real estate market, the government is bound to formulate a series of related policies in the process of “village in the city”. The government will grasp the development and construction of the “village in the city” macro, determine its appropriate development intensity, and share reasonable municipal supporting facilities to ensure that the “village in the city” transformation is coordinated with urban development.

However, in order to maximize the pursuit of its own interests, developers are expected to obtain “village in the city” land with low land prices and superior conditions, and carry out high-intensity development. At the same time, the developer also asked the government to provide necessary preferential policies, including industrial policies, taxation, and legal system guarantees, or require the government to provide benefits to the development and construction units in a subsidized manner. Therefore, the contradiction between policy restrictions and marketization, the balance between development costs and benefits (mainly concentrated on the floor area ratio of reconstruction) has become the main content of the game between the government and developers in the process of urban village.

#### 2. Relationship between developers and people

The transformation of the urban village not only compensates the income of the village collective land output and value-added, but more importantly, it compensates the rental income. The developer participated in the transformation of the “village in the city”. What it is concerned about is the superior location conditions of the “village in the city” and the huge business opportunities and economic benefits it brings. They are reluctant to negotiate with village collectives and villagers who do not own land ownership on compensation issues and are even less willing to assume the social security responsibilities of future resettlement and medical care, unemployment, and old-age care. However, the transformation of “villages in the city” involves not only the vital interests of the villagers’ houses and homesteads but also the problems of their resettlement and living sources after the transformation. Therefore, the compensation for the transformation of “village in the city” and the compensation plan for demolition and resettlement has become the focus of the interests of both developers and owners.

Due to the interest conflict among the stakeholders, negative social influence is easily created in the developing stage. Public participation is evitable in this stage. Villagers and tenants require democratic power. They want to live a nice and comfortable life and be protected by law. They work hard to fight for their right. At the same time, developers work for their profit. The balance of the stakeholders’ interest is the key to avoid the negative social influence of the urban village development.

### 3. Forced eviction and demolition

The development stage raises tensions between the government and the developers, between the developers and the villagers. It is difficult for the farmers to move by the short-term eviction notices. It created many inconveniences to their lives. Besides, some of the villagers have lived in their places for years. They have feelings for their old place, and they do not want to move to another place. The forced relocation hurt their feelings.

### 4. Relocation of landlords

Because of the regeneration, large numbers of villagers are relocated to another place. This relocation changes their living situation. The government should help them have a smooth transform. Villagers move from bungalows to apartments in buildings. They need time and care to get used to the new living environment. Besides, the change of social activities caused by the regeneration, such as leisure-time activities and public gathering also need to be paid attention.

## 6.2.4 Fourth phase: the disappearance stage

The fourth stage is the collapse of the village in the city (complete urbanization). In this stage, some of the villages have been regenerated, while some of the villages have decided the regeneration plan. For the latter villages, the regeneration plan has been settling down, and the villagers have accepted it.

With the development of the city and the subjective aspect, some of the descendants of the village are better educated. They are willing to integrate into the modern city, break away from the social relations of the villages, and actively migrate to other places to live. On the objective

side, the city is increasingly unable to tolerate the continued existence of villages in the city, and it is required to eliminate the adverse effects of urban villages on the urban landscape, transportation, public security, and disaster prevention as soon as possible. In the end, through a specific urban construction project, the demolition of the village in the city was included in the agenda, the community in the village gradually disintegrated, and the villagers gradually integrated into the urban society.

*Table 24 stakeholder analysis in the disappearance stage of urban village*

Stakeholders	Power	Interest
<b>Villagers</b>	<ul style="list-style-type: none"> <li>• Villagers have their power as urban residents.</li> <li>• Villagers can also rent their place or house to the outsiders to earn money.</li> </ul>	<ul style="list-style-type: none"> <li>• The living environment is important for the villagers. Convenient and comfortable environment is preferred.</li> </ul>
<b>Tenant</b>	<ul style="list-style-type: none"> <li>• Tenants do not have much power. They can decide if they still want to live in this area.</li> </ul>	<ul style="list-style-type: none"> <li>• They also prefer the convenient and comfortable living environment. At the same time, they prefer lower living cost and rental cost.</li> </ul>
<b>Government</b>	<ul style="list-style-type: none"> <li>• For the urban villages that is still in the process of the regeneration. Government is in the transforming from the village level to a city organization. Government still have the power in the regeneration project.</li> <li>• For the urban villages that has been regenerated, a city management organization in the sense of a territories was established in the urban village area. The management organization is a community resident committee under the street office. The government plans to set up a city street office nearby, or set up a city street office according to management needs to carry out urbanization management of the urban village area.</li> </ul>	<ul style="list-style-type: none"> <li>• The government officials want to promote social stability, improve government prestige and fiscal revenue.</li> </ul>
<b>Developers</b>	<ul style="list-style-type: none"> <li>• For the area that has not finished the regeneration, developers keep working on it.</li> </ul>	<ul style="list-style-type: none"> <li>• Developers want to improve the company's brand, and gain development experience.</li> </ul>

### 6.2.4.1 Relationship analysis

In this phase, the tumultuous relation between the government and people has been stabilized.

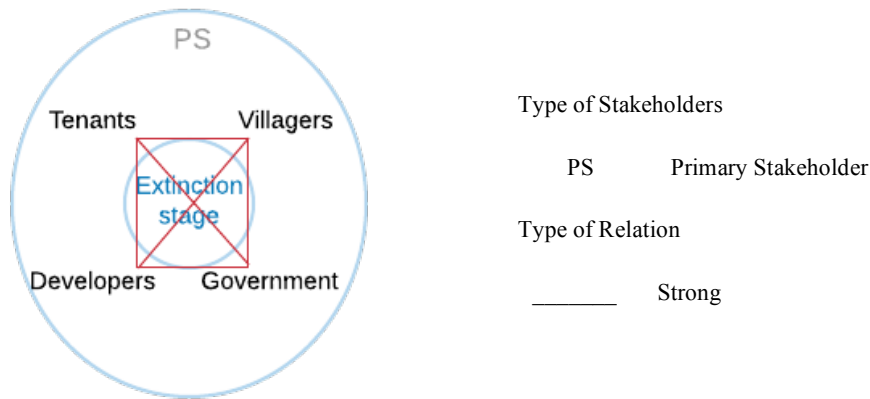


Figure 31 stakeholder relationship analysis in the disappearance stage

For the compensation for urban village reconstruction, the Harbin government decided to implement a monetary resettlement policy to save on temporary expenses. At present, 8941 households have moved back to their new homes.

Following the relevant national policy requirements, Harbin actively promoted the monetization of sheds and relocations. In mid-April, the “Notice on Further Accelerating the Work of Renovating the Relocation of Residential Buildings in Shack Areas” was issued and issued in Nangang Railway Command and Dispatching Center and Daojing Jingyu. The trials in the streets, ceramic districts, and bungalows in Xinjiang Street have effectively saved the cost of temporary relocation and shortened the time limit for net land. The second phase of the ceramics shed reform project implemented this year was the first project to adopt the monetization resettlement policy. After the levy was launched on May 16, 1142 households were relocated within the relocation incentive period, accounting for 97% of the total households.

### 6.2.4.2 Social influence - Nail households

Nail households are used to refer to houses that are not demolished for various reasons and are located in downtown areas or development areas. These households refused to move when they used the land for urban construction. The reason why “nail house” has become a nail house is that it is generally considered that there is not much compensation for demolition, and it is more in line with its interests to obtain from the developer.

The main reason for the ‘nail households’ is that the compensation for demolition is too low, and the relocated households have no resettlement houses. The property of urban residents is critical to a family, but the compensation standard given by the demolition party is often too

low, or the agreement is not fulfilled. Most of the demolished residents are low-income families with low incomes. After demolition, they often choose to purchase more ordinary commercial housing. The construction plan of the government department is unreasonable. In some urban real estate markets, there is an insufficient supply of low-priced commercial housing and affordable housing. Once the house is demolished, it is easy to cause family earthquakes and social conflicts. From the data analysis of the demolition of the petitioners by 50% year-on-year, the compensation is unreasonable and not in place is an important reason why the relocated households are difficult to accept the demolition.



*Figure 32 nail household from the previous urban village in Harbin*

Figure 33 shows the nail households in Harbin (Soho, 2018). Residents of the old urban village are reluctant to relocate. Construction personnel has opened two small roads for vehicles to pass through. Today, these nail houses have been here for more than half a year, and the road is narrow, which brings a lot of inconvenience to the traffic. Hard to turn someone else's 12 lanes into 5 lanes. This hinders traffic and seriously affects traffic safety. According to reports, residents in the residential buildings and shanty towns are reluctant to move because of compensation problems, and the two sides are deadlocked. The construction party only came to this decision and walked around. Roads are not completely smooth, and vehicles often become congested here.



### 6.3 Stakeholder involvement and city image

Based on the book image of the city, the content of the city images can be classified into five elements: path, edge, district, node, and landmark. as shown in Figure 26 in section 5.3.1, during the urban village redevelopment process, urban village improving the city image can be seen from different elements. The streets are wider and cleaner. The boundaries between city and urban villages are disappearing. The districts of dirty and chaos communities are renewed. Landmarks could be built depending on the design of the new area.

As mentioned in section 2.3, the city image not only refers to the city vision which is the landmarks or city viewings, but also refers to the city behavior. The urban village regeneration helps urban economic development, giving an advertisement to show the developing of the city. Beside of this, the image of the government can also be considered as part of the image of the city. The disputes during the urban village development process will influence the impression of the citizens or travelers to the city. On the other hand, the success of the regeneration project can foster civic pride, improving the city image.

Different stakeholders during the urban village development process have different interest and power, as shown in the Table 26. Both the government and the people want to see the city has a better city image, but from different perspectives. The government has the duty to create a nice city image, which is important to city development, such as tourism opportunities and economic development. People who live in the city would like to live in a nice environment and enjoy nice social service and caring. The power of the media is to reveal the true behavior of the government, which is also what they want to see.

*Table 25 Stakeholder involvement for the city image*

Stakeholders	Interest	Power (action)
<b>Government</b>	Would like to see a better city image	<ul style="list-style-type: none"> <li>• Improve the city image through events, activities, or other city marketing approaches.</li> <li>• Maintain nice government and people relationship to avoid disputes which have bad influence on the city image.</li> </ul>
<b>People</b>	Want to live in a city with a nice city image	<ul style="list-style-type: none"> <li>• Seek and ask for reasonable arrangement during the urban village development process.</li> <li>• Express their opinions about the actions from the government.</li> </ul>
<b>Media</b>	Keep the situation of the city transparent to	<ul style="list-style-type: none"> <li>• Show the real situation within the urban village development process.</li> </ul>

	all the actors in the city, including the government and the people	<ul style="list-style-type: none"> <li>• Reveal the improper behavior of the government, if it happens.</li> </ul>
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City image plays different roles in different urban village development stages, as shown in the Table 27. In the gestation stage, villages locate outside the city. The rural managing and operating system is different from the one in the city. The villagers and low-income group of people should be taken good care by the government. In the formation phase of the city, the regeneration project is in the beginning phase. The villages are surrounded by the urban area. The dirty and chaos environment of the urban villages have a negative influence on the image of the city. In the development stage, the typical urban villages are formed and under regeneration. At this time, the conflicts in construction and social culture become increasingly apparent. The image of the government is important for the image of the city at this stage. The unfairness and problems during the regeneration process have bad influence on people's impression on the city which is part of the city image. In the disappearance stage, the regeneration process is almost finished. The renewed district and the successful regeneration projects will become marketing advertisements to the city.

*Table 26 City image in the urban village development stages*

Stage	City image
<b>Gestation stage</b>	The rural managing and operating system is different from the one in the city. Villagers and low-income group should be taken good care by the government.
<b>Formation stage</b>	The dirty and chaos environment of the urban villages have a bad influence on the image of the city.
<b>Development stage</b>	The government and people relationship is the key element that influence the city image.
<b>Disappearance stage</b>	<p>The regenerated urban villages with modern community or business district could be a bonus to the image of the city.</p> <p>The success urban village regeneration project is also a positive publicity of the city, which improves the city image.</p>

## 6.4 Summary

There are several parties involved in the urban village development process, including the government, the developers, and the villagers, the stock companies, the tenants, and the NPC deputy. These stakeholders have different interest and power in the different developing stage



of the urban village. The interaction and collaboration between the stakeholders influence the relationship between the government and people and cause various social issues.

In the gestation stage, the collaboration is quite simple. The villagers and a small number of tenants live in the village and under the governance of the village-level government. The terrible environment and security problem are the primary social issues at this moment.

In the formation stage, the government begins the urban village regeneration plan. The developers start to be involved in the urban village regeneration project. The relationship between the government and people becomes intense. Serious disputes or even anti-government campaigning may happen if the interest balance is not handled well. Besides, large-scale relocation of the tenants and floating population is another social issue that may happen during this stage.

In the development stage, the relationship between the developers and the government, between the developers and the people become more intense. As a result, negative social issues have more chances to happen in this stage, which attracts more social attention, such as the media. The forced eviction and demolition might happen when villagers are not willing to move. Besides, the government should take good care of the relocated landlords.

In the disappearance stage, most of the regeneration projects have been finished. The tumultuous relation between the government and villagers has been stabilized. The nail householders are the main social problems in this stage. It restricts the landscape transformation of urban villages area and might even hinders the city development.

The balance of the stakeholders' interest is the key to avoid the negative social influence of the urban village development. However, it is difficult to harmonize the interest of all the stakeholders. Indeed, sometimes some of the parties have to compromise on the bigger picture. On the other hand, the compromising of the government and the developers, in the end, will still hurt the interest of the villagers, for example, the transportation re-arrangement caused by the nail households. The will of the villagers is respected, but the redesign of the road, in turn, has caused trouble for the villagers' lives.

In each stage, different stakeholders have different perspectives on the image of the city, including the positive and negative news during the regeneration and the city viewings of the urban villages. The success of the regenerate project could be an advertisement to the city which increases the proud of the citizens, while the disputes during the regenerating could also damage the image of the city. Besides, the dirty environment is not good for the city image, but after regeneration, the renewed urban village area could be a new landmark.

## 7 Relating housing value change and stakeholders during the urban village development process in Harbin

### 7.1 Introduction

Chapter 5 analyzed and discussed how does the housing price change during the urban village process. After that, Chapter 6 analyzed and discussed how the stakeholder involved in the urban village process. Actually, these two aspects cannot be totally separated. the housing value represents part of the stakeholder interest, which influence the views and expectation of the stakeholders. The housing value change will have different effect on the stakeholders' interest.

### 7.2 Stakeholder involvement and housing market situation in the urban village development stages

Based on the studies from Chapter 5 and Chapter 6, how is the stakeholder involvement, what is the typical social phenomenon happen in the urban village development process and how is the housing market change in each development stage can be included as Table 28.

*Table 27 stakeholder involvement and housing market situation in the urban village development stages*

Development stage	Stakeholder involvement	Social phenomenon	Housing market
The gestation stage	Government, villagers and tenant are the main stakeholders.	<ul style="list-style-type: none"> <li>• Rental houses lack of government management;</li> <li>• Safety issues in urban villages</li> </ul>	<ul style="list-style-type: none"> <li>• Houses far away from the urban village have higher price.</li> </ul>
The formation stage	<ul style="list-style-type: none"> <li>• Developers are involved</li> <li>• Compensation is the key to the game between the government and the land owners</li> </ul>	<ul style="list-style-type: none"> <li>• Large scale displacement of migrant tenants</li> <li>• Serious disputes</li> </ul>	<ul style="list-style-type: none"> <li>• Urban villages offer low-cost rental housing for the migration population.</li> </ul>
The development stage	<ul style="list-style-type: none"> <li>• Media, stock company are involved.</li> <li>• More conflict among government, developers and villagers</li> </ul>	<ul style="list-style-type: none"> <li>• Forced eviction and demolition</li> <li>• Relocation of landlords</li> </ul>	<ul style="list-style-type: none"> <li>• Urban village regeneration increased the supply of residential land and commodity housing.</li> </ul>
The disappearance stage	<ul style="list-style-type: none"> <li>• Stakeholder relationship stabilized</li> </ul>	<ul style="list-style-type: none"> <li>• Nail households</li> </ul>	<ul style="list-style-type: none"> <li>• The housing price in the regenerated village influences the average housing price in Harbin.</li> </ul>

As shown in Table 28, in each urban village development stages, the stakeholder involvement situation, the typical social phenomenon is different. And how the housing market is changed during the urban village development process can be divided into two parts: before the regeneration and after regeneration.

In the gestation stage, the stakeholder structure is relatively simple compared to the other stages. Government, villagers and tenant are the main three stakeholders. The urban villages at this stage are still lack of organizing. There are many issues, including the safety issues.

In the formation stage, developers are involved in the process. Based on the studies in section 6.2.2, how the compensation should be set is the main discussion and negotiation between the government and the villagers, and even the developers. At this stage, the migrant tenants living in the urban village will be notified to move. The compensation setting is hard to meet expectations from all the stakeholders, as a result of this, there is large possibilities to have disputes.

In the gestation and formation stage, urban villages are not under regeneration yet. Based on the study in chapter 5.2, before regeneration, housing in the urban village attracts large numbers of low-income groups because of the cheaper rental. Furthermore, houses closer to the urban village also have lower price than the houses far away from the urban village.

In the development stage, media, stock companies are also involved in the process. With the regeneration process, the conflict among government, developers and villagers become more and more intense. At this stage, the villagers are forced to move.

In the disappearance stage, the stakeholder relationship is more stabilized, since the regeneration process is almost ending. However, the nail household phenomenon appears.

In the development and disappearance stage, the regeneration process starts and closes. They are referred as after regeneration in this report. After regeneration, the average housing price in Harbin is influenced by the regenerated village. Besides, urban village regeneration increased the supply of residential land and commodity housing. Construction projects in urban village areas occupy a large proportion of all the construction projects in Harbin. From 2005 to 2014, the increasing number of urban village construction projects promoted the total number of construction projects in Harbin.

### 7.3 Housing value change brings the population relocation

As mentioned in the previous section, there is a significant relationship between the urban village regeneration and the housing price in Harbin. This housing value change will result in the relocation of the low-income group, as they cannot afford the houses in their current living locations. At the same time, when the housing price of the areas around urban village changes, local citizens have the willing to move, from the investment and saving point of view, which will not be further discussed in this report.

Except from the housing value change from the urban village regeneration, the urban village regeneration itself also cause villagers relocation. The villager relocation of the Pingfang district is discussed later in this section as an example.

These three different types of people, villagers, low-income group and relocated citizens are a big group of people which can not be ignored. The relocation of these people living in the city means the changing of city planning, property rights, etc. The details will not be discussed in this report.

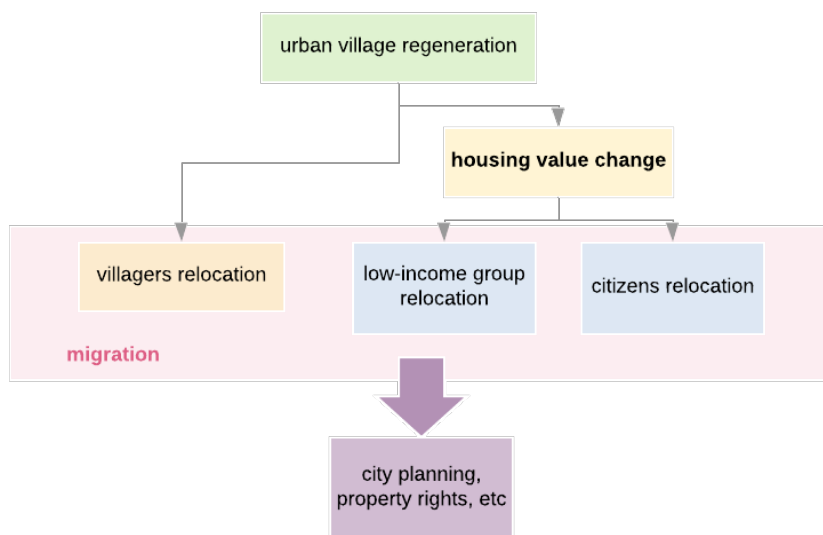


Figure 33 from housing value change to the population migration

How are the villagers relocated in Pingfang district in Harbin is concluded as the following Table 29. The location of the original and relocated places can be seen in Figure 35.

Table 28 villager relocation in Pingfang district in Harbin (Ma, 2015)

Natural village name	Administrative village	Transformation mode	Place of resettlement
Zhenghuang no.5 village	Pingshun Village	In-situ renovation	Pingfang Old Town
Liujiawobao	Liujiacun Village	In-situ renovation	Pingfang Old Town
Zhenghuangtou	Xinxing Village	Relocation in different places	Central residential area Pingfang town
Pingfang Village	Pingfang Village	Relocation in different places	Eastern residential area
Zhenghuang Siyi	Xinhua Village	Relocation in different places	Eastern residential area
Sanjiazi	Xinhua Village	In-situ renovation	Pingfang Old Town
Zhenghuang Sancha	Pingle Village	In-situ renovation	Pingfang Old Town

Da Qiaojiatun	Dongfu Village	Relocation nearby	Southern residential area
Merchants	Han Yu Village	Relocation in different places	Southern residential area
Yejiatun	Gaochao Village	Relocation in different places	Southern residential area
Four Family	Gaochao Village	Relocation in different places	Eastern residential area
Zhangjiadian	Gaochao Village	Relocation nearby	Eastern residential area

There are twelve main urban villages in the urban village regeneration project in Pingfang district. Among these twelve villages, six villages are moved further away from the original location. Two villages are relocated in a close by area. And four villages are renovated in the original location.

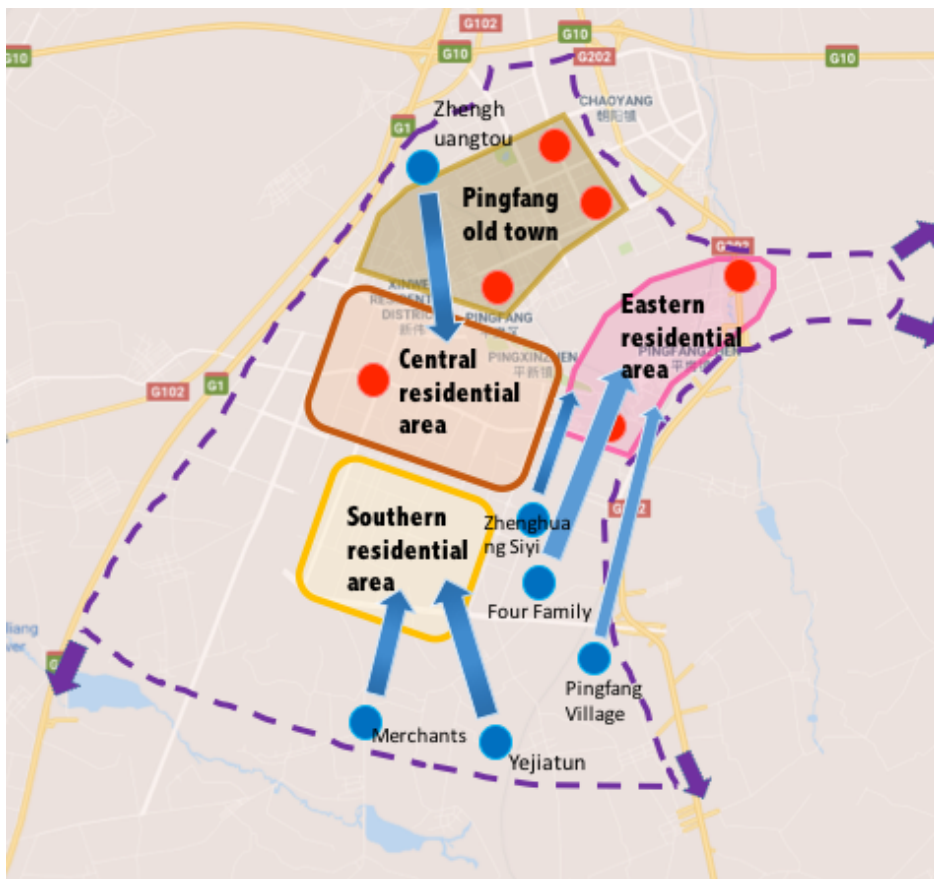


Figure 34 villager relocation in Pingfang district in Harbin (Ma, 2015)

## 7.4 Influence of the housing value change to the stakeholders

Because of the urban village development, the housing value at the location of the urban village increases. This housing value increase has different effect on the different stakeholders. Different stakeholders hold different views and different expectations on the housing value change, as shown in Table 30.

*Table 29 how the housing value increase effect the stakeholders*

Stakeholders	How is the housing value increasing influence the stakeholders
government	Housing value increase -> land value increase -> city development
developers	Housing value increase -> profit
villagers	Housing value increase -> get compensation from the developers and government
Tenants and operators	Housing value increase -> rental price not affordable; less opportunities to find low price rental places

Urban villagers have the advantages of high real estate rental income, because of the relatively central locations of their houses. They would like to see the compensation higher or at least not lower than their loss of moving to a less central location and the authority of the land. Next to the compensation in money, the transfer from villagers to citizens are also a compensation to them. Affected by the economic structure of urban-rural dual division, Chinese farmers have long been in the position of second-class citizens of the country. Therefore, in fact, the villagers in the village of the city are eager to take off the peasants' hats, change the existing production and lifestyle, and leave the villages with imperfect public facilities and infrastructure to truly "integrate" into the city. But they are also afraid of the loss of vested interests, worrying that their existing real estate rental income will not be protected in the transformation, and will also lose the benefits of good prospects for good real estate appreciation. (Zhang & Zhao, 2006)

The developers earn their profit from the land and estate value increasing. Real estate development as a business act, the pursuit of maximizing profits is understandable. However, the high price of real estate after the transformation of urban village is not mainly derived from the development behavior, but depends on the superior geographical location of the village in the city and the faster appreciation potential of the real estate brought by it.

The government's interests in the transformation of urban villages are mainly manifested in: achieving the government's goals (and at the same time being the individual's personal political performance), promoting the public interest and obtaining a certain amount of fiscal revenue. But at the same time, the government, as a type of economic organization, also has its own economic interests. China's land use system stipulates that the government imposes a monopoly on the primary market of the land. Collective land (the village land in the city belongs to the

collective land) is not allowed to directly enter the market. The collective land can only be transferred after being requisitioned by the state into state-owned land. The form of use rights is provided to land demanders. In this process, the land demand side will pay the transfer part (the land ownership income) to the granting country (the representative is the government), and partially pay the land acquisition fee to the original collective land property owner. Among them, the government paid any fees to the main body of collective land property rights, but got the proceeds of land transfer payments. This part of the transfer money constitutes the government's interests and has become an important source of revenue for some local governments. (Shen & Zhu, 2004)

Different stakeholders have different interest and expectations. The city government hopes to pay as much demolition and resettlement fees as possible when renovating the villages in the city, and vacate as much land as possible. Developers are pursuing maximum corporate profits, hoping to get as many favorable conditions as possible, with the least amount of time to withdraw funds and get the most profit. Village collectives (and villagers) expect to be able to truly “integrate” into the city, and fear the loss of vested rents and other benefits (China urbanisation strategy and policy analysis group, 2010), hoping to be in the city.

When the village is rebuilt, it will receive as much compensation as possible for demolition and resettlement, and will minimally affect the source of economic income. (Jia, Zheng, & Tian, 2011) The foreign temporary residents are afraid of vigorously promoting the transformation of the villages in the city, and at the same time they have eliminated their "housing place" in the city. It would be good for the villagers that the society and the government can protect their own rights and interests in the transformation of the village. In general, in the process of urban village reconstruction, different stakeholders have a strong incentive to erode the interests of other stakeholders in order to maximize their own interests. Under the guidance of traditional theory, the transformation of urban villages has limited resources and opportunities. After the interests and roles of various stakeholders are unclear, it is easy for all parties to compete for limited resources and opportunities. It hindered the smooth progress of the transformation of the village in the city.

The transformation of urban village needs to consider the corresponding compensation for the villagers. However, the complexity of the conversion of land property rights makes it difficult for the part of the collective assets belonging to the villagers to be compensated. These kind of institutional factors are major problems in the urban village development process. Institutional factors include the permanent identity of the village life system, the non-commodity of land resources and the government monopoly, the property rights relationship of the village collective economy which is not easy to define, and the big difference between urban and rural management mode. This thesis does not focus on the institutional aspect.

## 7.5 Summary

Three types of population migration are discussed in section 6.3: villagers' relocation, low-income group who lived in the village relocation, citizens' relocation caused by the average housing value change. The population relocation caused by the villagers' relocation is discussed based on the example in Harbin Pingfang district. Because of the housing value increase of the

regenerated urban village, low income group needs to move since they cannot afford the rent anymore. Furthermore, it could be deduced that during the urban village development process, the citizens have the willing to move because of the housing value fluctuation.

How the housing value increase effect different stakeholders are discussed in section 7.4. Different stakeholders have different views on the housing value change. During the urban village development process, villagers have less power and initiative. Urban expansion and land acquisition are causing farmers to gradually lose the most important survival resource—land. On the other hand, the change of “agricultural to non-agricultural household registration status” has not compensated their loss from the land. Bringing corresponding social security, and the unclear property rights make the part of the collective assets belonging to the villagers ineffective, and the individual choice of the farmers to integrate into the city is difficult, resulting in many contradictions between land use and urban planning. This weak position has prevented villagers from gaining their rights and interests in a proper way, which has led to problems such as nail houses and negative government news. Severe cadre disputes and collective cross-level petitions have made the village (residential) political power construction and ideological and political foundation very fragile, and thus become an important factor affecting social stability in suburban areas. The land issue has exposed the crux of the contradiction between the state and the peasants. The petition problem reflects the ills of the rural governance structure under the collective economy. These two fundamental problems that hinder rural modernization are highlighted and intensified in the “village in the city” formed by the rapid expansion of the city. When land resources are unrestricted, when the collective assets are divided by unrestricted, the self-dependent follow-up development of “village in the city” will become an empty talk. The problem of “village in the city” is fundamentally an adjustment of the relationship of interest structure. The cracking of the problem in the village of the city requires a process of institutional innovation.



## 8 Conclusion and discussion

### 8.1 Housing price, stakeholder involvement and city image in the urban village development process in Harbin

The objectives of this study to look into the current urban village situation in Harbin, to analyze the influences of the urban villages on the surrounding area and the Harbin city, and to propose suggestions to for the urban village development.

Currently, there are 79 urban villages in the main city of Harbin. These urban villages with different location and situation are in different developing stages. Some of these urban villages are in the process of transforming, while some have not been regenerated yet.

To understand the real situation of the urban villages in Harbin and how to mitigate the influence of their developing process, this thesis proposes a main research question as below below:

*How do the urban villages in Harbin and their regeneration influence the surrounding area and the Harbin city?*

This research question is analyzed from the perspective of how the urban village influences the housing value, how the urban village influence of the government and people relationship, and how the government-people-relationship and housing value change related to each other during the urban village development process. And all these studies are carried based on the urban village develop model and considering the situation happens in each stage of the developing process. Based on the findings in the influence on the housing market and stakeholder involvement, how do the urban village and their regeneration effect the housing market, the city image, the community life is given.

Four sub-questions are proposed to answer the main research questions.

1. *How do the urban villages in Harbin and their regeneration influence the housing market in Harbin?*

The urban villages in Harbin influence the housing market. The urban villages have a large size of the construction area for the urban expanding, which is an important source of the housing supply.

Before regeneration, urban villages influence the housing value in the market. Based on the regression model analysis, the closer houses are to the urban village, the cheaper they are. Besides, urban villages with low rental price provide rental houses for low-income groups. However, there are also problems in the urban village area, such as security, which should be paid enough attention to.

After regeneration, the regenerated urban villages in Harbin also influences the estate market. Based on the study of the regeneration of the Hada urban village in Harbin, it is found that the regeneration of the urban village provides housing land and housing supply. However, it does

not have much impact on the housing market demand due to the low-income of the residents. Besides, the housing price in the regenerated village influences the average housing price in Harbin, and the number of selling houses in the regenerated village increases the total number of selling houses in Harbin.

2. *How do the urban villages and their regeneration in Harbin influence the relationship between the government and the people?*

During the urban village development, the most influenced group is the villagers. Before regeneration government should pay attention to the security issue, living environment for the villagers. The compensation policy is the most important part of the transformation. Extra care should be given to the relocated villagers former tenants after the urban village regeneration.

Urban villages and their regeneration in Harbin cause social changes in Harbin. This influence of urban village is discussed in different developing stages of the urban villages. In the gestation stage, the relationship between government and residents is simple and weak. However, illegal activities happen in early-stage-villages because of the under-developed situation. In the formation stage, the relationship between several parties becomes more complicated. The main issue is the game between government and owners, which should be considered well in respect of compensation. Furthermore, the issue of large-scale displacement of migrant tenants and disputes to the government happen during the formation of the urban village. In the development stage of the urban village, the developers have to collaborate with the government and villagers. There could be the issue of forced eviction and demolition during the negotiation process between the developers and villagers. Besides, the government should consider the relocated landlords who have to face different social changes during this time. In the disappearance stage of the urban village, the relationship between government, developers, and residents becomes relatively simple. However, there are nail households left after the renovation of the urban village, which becomes a tough barrier for urban development.

3. *How are the influences on housing value and stakeholder relationship related to each other?*

During the urban village development process, the stakeholder involvement and the followed typical social issues have a close relationship with the housing market change. Firstly, housing value change will bring population relocation. There are three types of relocation: the villagers relocate because of the generation. Most of this relocation happens in the development stage; the low-income group relocation because of the urban village housing value change. This relocation exists in the whole urban village development process. The main part happens in the formation and development stage; the third type of relocation is the local citizens' relocation because of the city housing value change. This happens in and after the disappearance stage. Secondly, the housing value change will affect the interest of the stakeholders. The government wants to see the landing value increase resulting in the city development. Developers want to gain profit from the housing value increase. Villagers want to get more compensation. The housing value change is the key to the game among the government, developers, and villagers.

4. *How do the urban villages and their regeneration in Harbin influence the city image?*

During the urban village development process, the relationship between the government process becomes tense, especially in the formation and development stage. The city image will be damaged when the government does not well take care of the villagers and tenants, which influence the government people relationship. Besides, different stakeholders in the urban village development process have different perspectives about the city image. They all want to see a better image of the city. The government should consider thoroughly about people's lives. Villagers and tenants should express their feelings and needs. Media should fulfill their responsibility to keep the information during the process transparent.

The city image is influenced not only from the perspective of the city behavior but also from the perspective of the city vision. When the urban villages are not regenerated, the derelict houses and poor community environment has a terrible influence on the city image. After the regeneration, high-rise buildings and high-end business districts are built to replace the original villages, which helps to improve the city image.

## 8.2 Urban village and urban development

The goal of this study is to find out how the urban villages and urban village regeneration influence the city, especially in the housing value aspect and social aspect. What makes this study unique is that this area is medium size cities with relatively low economic developing speed. This results in that besides exploring the urban village development process, the economic situation becomes an important view to analyze the influence. The housing value change is picked as a representative since it is the most concerned, typical and related topic.

### 8.2.1 City image

Urban villages have a close relationship with the city image. City image is the motivation why the government would like to regenerate the urban village. At the same time, the regenerated city image contributes to the located city's city image.

#### ◆ Chaos in the urban village

Before regeneration, urban villages have problems of the dirty and chaotic living environment, poor social security condition, disorder housing construction, and low land use efficiency, etc. These problems, consequently, have a negative influence on the image of the city. As a result, the government of the city would like to regenerate the urban village to improve the city image.

After regeneration, urban villages will merge into the city in the form of a new community or business district. This could be a benefit to the city image. Besides, the successful regeneration of urban villages in the city is always good news of the city, which is always highly concerned.

#### ◆ Government and people relationship

During the regeneration, the relationship between government and people become complex. Especially when it comes into the compensation issues, if the government cannot deal with it properly, villagers are easily to be angry and upset about the government. This will have a terrible influence on the government image of the city.

Besides, during the regeneration, there is a large amount of capital flow. As a result, corruption, and degeneration easily happen in this period, which will decrease the trust from the people to the government.

By all means, urban villages and urban village regeneration process have a significant impact on the image of the city. For one thing, the social problems of urban villages hurt the city image. For another, during the regeneration process, the compensation process, and the corruptions within the government system are not conducive to the city image either.

### 8.2.2 Urban village and housing

Houses in urban villages are bungalows and low buildings. Compared to the urban area, land use efficiency is quite low. For the city area, where housing supply is in shortage, urban villages are a vulnerability to be solved or an opportunity to provide more housing. After regeneration, the area of the original urban villages could be reconstructed into new communities or green area to improve the environment of the city.

Besides, urban villages also impact the housing value in the city. It is a good chance to relieve the rising house prices or for the government to provide cheap housing. The government can take advantage of the transformation of urban villages to control housing prices, such as low-rent housing and low-priced commercial housing.

Not only the urban village and urban village regeneration influence the housing market but also the housing market have an influence on the urban villages and city in return. Firstly, the interest of the villagers, government and developers are closely related to the housing value. The government wants to see the city development which is effect by the land value change. Developers want to gain profit from the housing value increase. Villagers want to get more compensation from the government and the developers. The housing value change plays a key role in the game between government, developers and villagers. Besides, urban village regeneration causes the population relocation of that area. The relocated people includes villagers, low-income group and local citizens.

## 8.3 Suggestions and discussion

The potential problems in urban village development are pointed out in chapter 2. Based on the analysis in this report, these problems are discussed and suggestions are given.

### **Funding problem of the urban village development**

Based on the situation of Harbin, plan together, exploit separately funding mode which is advocated by the National Development and Reform Commission. This model is suitable for large-scale cities, as mentioned in section 3.4 and Harbin is one of the largest city in China. Besides, this model is better to maintain the relationship between the government and people. It is more suitable for the Harbin city which has several districts with distinct different situations. Furthermore, it is easier to follow the successful cases, such as Baoding who has a similar social and economic situation as Harbin than other far more developed cities, such as Shenzhen.

In this case, the Harbin government will be the source of investment. The urban village development project will be centralized by the government-established specialized agency or commissioned by the project management company in the market. After the project is completed, it will be handed over to the village collective or the user.

The villagers will collectively be responsible for the operation of the project. Under this model, the government commissioned a specialized agency or company to act as a developer and directly invest in the transformation of the urban village to solve the problem of resettlement and resettlement of the villagers and achieve the transformation goals.

### **Compensation of the urban village regeneration**

The relationship between government and people will be tumultuous in the process of urban development, as discussed in chapter 5. The compensation to the villagers should be considered thoroughly to reduce the intense protest from them.

As mentioned in section 2.2.4, the value of the rural land and some other loss is unmeasurable, which decides the compensation harder. For this issue, two suggestions are given. Firstly, the housing value model could be used as a prediction of the land value. Government or developers should set more transparent and detailed rules for the calculation. Secondly, interviewing and discussions between the government and villagers are important to comfort the mood of the original residence.

Besides, the relationship between the government and the developer changes with the stages of urban village development. At the beginning of the urban village development, the government should be proactive and take the initiative. Some regulations and methods to protect the villagers should be discussed beforehand. During the regeneration process, the government should also be involved to monitor the actions of the developers.

### **Floating population**

The floating population plays an essential role in the urban village, which is in the urban area but has less cost of living. Their lives are closely related to urban village development. The living situation of these people should be taken good care of.

The housing value change during the urban village development process would influence the floating population. The housing value will increase with the urban village regeneration process, as discussed in chapter 4. If the urban village is regenerated, they will lose their place of living. These floating population will easier lose their shields and might even be homeless. The low-rent apartment should be arranged to consider the life of these people. China's 'ant tribe', which refers to the low-income group of young people, is also considered as the floating population. If they lose the chance to live in the urban village area, life will be harder for them. The living condition of these people should be considered by the regeneration project owner.

Before regeneration, the security situation of the urban village is a big problem. In crime-prone areas, crimes are increasingly rampant, which not only affects local social security issues but also affects the city's social environment and affects the city's social and economic development. Local government should pay more attention to protect the villagers and floating population. The government needs to pay attention to the urban villages no matter before or after their

regeneration. Governmental and safety issues need to be considered when the urban villages are not renovated yet, while the housing value and estate market need to carefully control after the regeneration.

## 8.4 Limitation and perspective of the research

### 8.4.1 Limitation of the research

In this thesis, the urban villages and their regeneration in Harbin are analyzed, including the effect on the housing market, on the people and government relationship, etc. However, there are many aspects not covered.

The influence of the urban villages on the housing market is studied. However, due to the limit access of the housing value data, only values in several years can be used in the model. Besides, five districts in Harbin are the target group in this research, as urban village issues are not very obvious the other districts. Besides of the influence on the housing market, urban villages also have an impact on the other economic development of the city, including the low salary labor supply and the large shopping center construction after urban village regeneration.

In this thesis, the social and economic aspects of the urban villages are considered, but not the environmental aspects. Urban villages have the problems of low population density and dirty atmosphere. After regeneration, the original urban village area can provide more housing supply or planting areas. There are many studies about how the original urban village and the regenerated urban village influence the environment in the city. This part is not covered in this thesis.

Based on the Chinese Land Administration Law, the rural land is owned by the farmer collectives, which is different from the situation in the urban area. The related property ownership study is not included in this thesis. Besides, the household registration system is another aspect that distinguishes the urban and rural area. This is also not discussed in this thesis.

China is a large country. Different area and different cities have different social, economic situations. The difference between developed cities and underdeveloped cities, from capital cities and non-capital cities, could be huge. No unified theory or situation could apply to all the cities in China. In this thesis, only the case of Harbin city is discussed. Each city's or area's case worth to be looked into and discussed.

Time is also a doubtable study dimension. The influence of the urban village and its regeneration could last for a long time. To discover the influence of urban village development, the study worth to be carried in an extended period.

### 8.4.2 Perspective of the research

The topic of this thesis matches the Engineering & Policy Analysis track which is analyzing and solving complex problems that involve many parties with conflicting interests. Stakeholder analysis, which is used in this thesis, is an important tool introduced by EPA. Statistic modeling

is one of the fundamental themes of the EPA program. The content of the housing value analysis is based on the knowledge of statistic modelling.

The result of this thesis complements the urban village development model, which describes the four stages in the urban village development process. For one thing, it gives the stakeholder involvement information in each stage. And related to this, the housing value changing trend is also given. For another, this thesis gives information about the urban village development process in the medium size cities like Harbin.

The analysis of urban village and housing value in this thesis shows that the influence of the urban village on the housing market depends on the regeneration stages. Further study could be carried on the development process based urban village housing value model, which distinguishes the difference before and after the urban village regeneration.

Many scholars focus on the study of urban villages in China (Da, 2016; Haiyun & Lijun, 2008; Jianming Gou, 2006). However, few of them mention the pressure and difficulties the urban villagers need to meet in their lives (Jia, Zheng, & Tian, 2011; Jianming Gou, 2006). Urban villages are an important social phenomenon that influences the urban development. But people who live there should also be taken enough consideration about how their lives going and their feelings about the whole changing process.

This thesis gives a comprehensive analysis of the urban villages in Harbin from the economic and social perspective, which was missing before. Besides, there are many studies about the urban villages in Beijing and Shenzhen (Da, 2016; Guikai & Junwei, 2009). However, there was not a lot of studies about the urban villages in less developed cities, such as Harbin.

Future research could be carried out in these following aspects:

- The policies regarding urban villages in China are not analyzed and discussed in depth in this thesis. Further research could collect more information about different urban village policies and see how these policies influence the urban village development process.
- This thesis can be combined with more knowledge of land property. The land systems in urban area and rural area in China are different. During the urban village regeneration, the transformation of the land system is important.
- Current studies in this thesis can be compared with similar studies for other cities in China. Since the situation in different cities are different. It is interesting to see how urban villages are different in different cities.

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## Appendix I Stakeholder analysis

The opinions from different stakeholders, including government officials, NPC deputy, experts and scholars, villagers, stock company, and tenant and operators are collected from the newspaper and forum (people.cn, 2018; leju, 2018; Harbin tieba, 2018). In total, there are 36 actors' opinions collected. The responsibility, power, and interests of these roles can be seen based on their views.

As shown in Table 19, different roles have different perspectives of view. Based on the stakeholder's statement, their interest during the urban village development can be observed.

Table 19 views of the stakeholders in the urban village and its development

Views of government officials	<ul style="list-style-type: none"> <li>• Now the 'village in the city' has become a city's ills and cancer. Why? It was the result of the construction that year, and it has not been solved very well until now.</li> <li>• To the 'village in the city' must strengthen the work, dare to grasp the management, all relevant departments should coordinate and cooperate with the war, to solve the problem of the transformation of the 'village in the city.' It is also a strategic issue to quickly reform and improve the level.</li> <li>• The transformation of 'village in the city' is a complicated issue. It must be objective and prudent, and guide the work with a scientific outlook on development. We must respect history. 'Village in the city' has contributed to the construction of the SAR (providing large land resources, etc.). Land, there is no skill, can only build private houses for rent. The government did not plan, control, and lack. At the time, we should adhere to the principle of people-oriented. The essence of 'village in the village' is to improve the living standards of the villagers and should not be harmed to solve the problem. The feelings of the villagers. Based on the height of building an internationalized city, considering the actual economic capacity, the implementation should be carried out step by step. The transformation should be planned first. The planning should be divided into levels and step by step. It is necessary to formulate the development plan of the 'village in the village' as a high starting point for the follow-up. Urban development creates conditions.</li> <li>• On the one hand, we will increase the control over the construction and construction, and on the other hand, we should use the special fund to renovate.</li> <li>• We have to listen to all kinds of opinions in the society. We must have a rational analysis and be forward-looking. We cannot fall behind and planning cannot fall behind.</li> </ul>
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	<ul style="list-style-type: none"> <li>• A mature city should provide people with a variety of choices. Living in this city, you can choose a high standard of living. Of course, you can also choose a low-rent housing. Our government does not provide this market. It should be said that In the past 20 years, the development of urban social economy has contributed to the 'village in the city'. We have been talking about the shortcomings of 'village in the city'. In fact, it has made considerable contributions to urban economic development and social development.</li> <li>• There are too many tertiary industries in the city that depend on the 'village in the city.' The employment of the tertiary industry basically lives in the 'village in the city'. If their living costs increase, then the cost of the food we eat is also Will improve, this is an economic chain, will be for all people, whether or not they live in the 'village in the city'. Every change in the 'village in the city' is related to our life, this is certain, so Cannot talk about 'village in the city' on 'village in the city'.</li> </ul>
Views of the NPC deputies	<ul style="list-style-type: none"> <li>• On the one hand, the government departments must focus on renovating old villages, and they must increase the intensity of handling illegal buildings to prevent the old villages from being changed and new ones.</li> <li>• The villagers obey the overall situation in the development of the city, and should levy a large amount of land and sacrifice a large personal interest. Therefore, in the transformation of the old village, the government should fully consider the interests of the villagers and not let their interests be harmed.</li> </ul>
Views of experts and scholars	<ul style="list-style-type: none"> <li>• The so vibrant and popular place like the urban village is part of the diversification of the city. An international metropolis should be inclusive and allow various groups to live here. The temples in Hong Kong are not as good as us. 'City Village,' but now people have protected it as a cultural relic.</li> <li>• The essence of the transformation of urban village is to balance the interests of the government, the owner and the transformation unit by solving the four problems of property rights, planning, land price and compensation and resettlement. Solving the problem of land property rights is also the basic premise for the transformation of the urban village.</li> <li>• The case of urban village shows that urban village is produced in the process of high-speed urbanization, but it is not the inevitable result of high-speed urbanization. The emergence of urban village is actually the result of the government's lack of understanding of the difficulty of the original rural problems and insufficient preparation.</li> </ul>

View of the developer and stock company	<ul style="list-style-type: none"> <li>• If the odds ratio is less than 1:1, the work is difficult to do and the villagers will not accept it.</li> <li>• The best way to transform is to dismantle and rebuild the whole. It is jointly developed by the joint stock company and the developer. The overall planning and supporting of the community should be done by the government, and the government should give support in terms of funds, policies, and taxes.</li> <li>• Equity is also part of the villager's income. Therefore, if it is demolished, it is necessary to compensate for the loss of equity, and compensation and resettlement for unemployed employees.</li> <li>• As long as the country can satisfy us on the issue of floor area ratio, the transformation will not be a problem.</li> <li>• As long as the buildings outside the red line are given reasonable compensation, the red line should be compensated normally. If there are shops, the shop should be compensated according to the standard of the shop.</li> <li>• Whether the compensation plan can be supported and accepted by the villagers is the key to the success of the transformation.</li> <li>• For farmers, they are used to guarding an acre of three-point land, like the life of an exclusive house, and do not like a lot of buildings.</li> </ul>
Views of the villagers	<ul style="list-style-type: none"> <li>• We are all borrowing money to build a house. Now the cost has not been recovered, and now the house is well rented. These years are the key period for collecting costs.</li> <li>• Although the environment is good after the renovation, what if the house is not rented? Like the fisherman village, the risk is high.</li> <li>• The odds of breaking the odds of less than 1:1 will not be accepted. The previous odds ratio is 1:1 or more, and some are 1:1.5.</li> <li>• We have lived here for generations and we are not willing to leave.</li> <li>• I support the transformation, but it is best to change it in ten years. Can you not change it now? Let us recover the money for building a house. We built a house very hard, making money to build a house and then withdrawing money. Covering another house, another house earning money and continuing to renovate and repair it. It's just a tinkering, it costs a lot of money. The cost of building my house is recovered, but the cost of renovation in the past few years. It has not been recovered yet.</li> <li>• If I change it, I don't need money compensation for the house. The house is the source of our income. After the child is not working, I have to rely on the house to maintain my life.</li> <li>• I still have a real estate license for the house. I am not afraid that it will expire in 70 years. I can handle my own house. If I have collective ownership, I will not have property rights.</li> </ul>

	<ul style="list-style-type: none"> <li>• The rent of the original house after the renovation will be compensated from the date of signing the contract to the new house, and the government will help us solve the problem of renting a house.</li> <li>• Although the environment after the renovation is good, it may be that the rent of the house has become higher, but after the economic situation, it is difficult to say whether it affects the rent and occupancy rate, so the compensation cannot be smaller than the current area.</li> </ul>
Views of tenants and operators	<ul style="list-style-type: none"> <li>• People like us can only live in the village of the city. If they are all transformed, we really don't know where to go</li> <li>• Now live here, one is to work near, do not have to take the car, the second is that the rent is cheap (shared with people), and can save some money every month. If the cost of living is high, we can only go.</li> <li>• It doesn't matter if the law and order is not good. Just manage ourselves. We don't want to get in trouble. We just want to do some business. I have to support my family. Children have to go to school. Parents have to take care of them. If I take it apart, I don't know. What to do.</li> <li>• There is no improvement. There is no place for us to stand here. Our small store is only for low-income people. We don't have the money to invest in big business. The rich don't go to our store to buy things.</li> <li>• Reconstruction will bring us a lot of losses. I want to rent a house, I need money, I have to pay for the transfer fee, the decoration fee, and the cost of the investment. The law and order is not good for us. I just don't want to It's okay to do bad things.</li> <li>• It's a big problem for people like us to go home, and there's nothing to do.</li> <li>• Living in the 'village in the city' has many unsatisfactory places, such as: too many people, poor family planning management, lower and lower grades, and chaos. There is gas in the downstairs, very unsafe, stealing. It's more serious. I have already encountered it three times, and my home's door has been smashed.</li> <li>• The village in the city has good places and bad places. Good, for example, the location is good, the consumer groups are many, the bad ones are too dense, the road is too narrow, the school is too narrow, and there is no school. This is because the villagers build their own houses and the management in the village is not in place.</li> </ul>



## Appendix II Housing market data

District	Location	housing value (yuan/ m <sup>2</sup> )	distance to the closet urban village(km)	number of urban villages within 10km	size	year
Daoli	changyujiayuan	3810	3	1	108	1987
	changyujiayuan	3920	2	1	89	1987
	Chunyuange	3125	3	1	98	2008
	Chunyuange	3680	3	1	103	2008
	Fuyuan	3110	3	1	135	1989
	Fuyuan	3360	3	1	122	1992
	hagongguan	35737	7	1	98	1990
	hagongguan	36827	7	1	138	1996
	hongruncuihutian	37384	7	1	57	2002
	hongruncuihutian	36522	7	1	68	1991
	jinshang	3142	4	1	51	2003
	jinshang	3274	4	1	128	2005
	shenghetianxia	37417	7	1	68	2002
	shenghetianxia	36524	7	1	148	1993
	taipinghuwenquan	4960	4	1	104	1991
	taipinghuwenquan	5120	3	1	67	1994
	taipinghuwenquan	4960	4	1	119	1988
	waitanshoufu	26260	9	1	118	1995
	waitanshoufu	27370	9	1	85	2003

	taipinghuwenquan	4950	4	1	49	2004
	waitanshoufu	20938	9	1	135	1996
	shunda	6167	3	1	65	1997
	shunda	5684	4	1	60	2006
	shangyedaxue	8214	5	1	114	1999
	baishunfenghua	14692	6	1	128	1988
	baishunfenghua	13682	6	1	113	1996
	baishunfenghua	13766	6	1	114	1994
	baishunfenghua	13672	6	1	63	2007
	jingweijiayuan	12033	6	1	46	1989
	jingweijiayuan	12876	6	1	104	1992
	jingweijiayuan	13654	6	1	66	1996
	jinjianghuayuan	9190	7	1	75	1989
	guanjianghuayuan	8976	8	1	79	1994
	guanjianghuayuan	7865	7	1	132	1987
	tianewanhejun	19347	6	1	140	1996
	tianewanhejun	16543	6	1	68	1998
	tianewanhejun	21036	6	1	66	2004
daowa	pingan	2857	4	2	116	2002
i	rongxingxinyue	4500	4	2	137	2002
	pingan	3678	3	2	58	1999
	rongxingxinyue	3589	4	2	115	1989
	tianhe	2783	3	2	63	1993
	tianhe	2378	4	2	126	2000
	tianhe	2376	3	2	140	1988
	longjiangdianjichang	4800	4	2	121	2008

longjiangdianjichang	4800	3	2	93	1989
baoyutianfeng	23171	7	2	142	2001
baoyutianfeng	25872	7	2	127	2006
baoyutianfeng	24823	7	2	115	2001
longshengjiangpan	17694	7	2	48	1992
longjiangdianjichang	13736	7	2	95	2000
dongshengjiangpan	17694	8	2	55	1995
longshengjiangpan	16532	8	2	53	2006
rongyaoshangcheng	16101	8	2	55	1997
rongyaoshangcheng	16322	8	2	101	2000
rongyaoshangcheng	15987	8	2	117	2000
nanjiguojiming	10860	7	2	116	1995
nanjiguojiming	10792	7	2	133	2007
nanjiguojiming	12872	7	2	108	2005
huayuanxiaoqu	6723	5	2	109	1999
huayuanxiaoqu	6734	5	2	137	1991
huayuanxiaoqu	6732	5	2	94	1988
pinganxiaoqu	8814	5	2	140	1989
pinganxiaoqu	8876	6	2	148	1988
pinganxiaoqu	8625	5	2	71	2007
huanan	13096	6	2	79	2006
huanan	13402	6	2	106	2003
huanan	13689	6	2	137	1990

	haiduhuating	8240	5	2	122	1989
	haiduhuating	8673	4	2	133	1996
	haiduhuating	8736	5	2	92	1998
	sankeshu	7524	4	2	89	1987
	sankeshu	6734	5	2	133	1997
	sankeshu	6734	4	2	59	1990
xiangfang	shehelujingjing	2773	5	2	66	1994
	shehelujingjing	2765	5	2	124	1995
	beizuojiayuan	3000	5	2	98	1993
	beizuojiayuan	3189	5	2	46	2007
	dengjiacun	3035	5	2	81	1996
	dengjiacun	3078	4	2	76	1988
	shehejingli	3443	4	2	146	2002
	shehejingli	3567	4	2	68	2008
	kunlunzhuangyuan	38461	6	2	55	1995
	kunlunzhuangyuan	37654	6	2	67	2004
	sijishangdong	19718	7	2	146	2001
	sijishangdong	19718	8	2	122	1995
	shangheshu	18768	8	2	106	2006
	shangheshu	18763	8	2	119	1996
	shangheshu	18654	8	2	148	1987
	fenghuashequ	18052	8	2	106	1991
	fenghuashequ	17934	8	2	70	1988
	fenghuashequ	17398	7	2	90	2001
	fenghuashequ	17349	8	2	77	2005
	mujiaxinqu	3876	4	2	47	1997
mujiaxinqu	3876	4	2	142	1997	

	huafujiayuan	12682	6	2	104	1989
	huafujiayuan	12670	6	2	100	2000
	huafujiayuan	12893	6	2	107	1999
	dianjixincun	5490	4	2	80	2007
	dianjixincun	5489	4	2	117	2007
	dianjixincun	5372	4	2	142	1987
	youyuanxiaoqu	9989	4	2	132	2000
	youyuanxiaoqu	9821	4	2	143	1995
	youyuanxiaoqu	9843	4	2	60	2007
	zhuolinjiayuan	12432	7	2	81	1987
	zhuolinjiayuan	12378	7	2	133	1996
	lindaheping	8763	6	2	77	2004
	lindaheping	8783	6	2	111	1996
	donglifanju	7988	6	2	62	1999
	donglifanju	8023	6	2	139	1990
	donglifanju	7923	6	2	145	2004
	dingyuanmingfu	12200	6	2	71	2001
	dingyuanmingfu	11397	8	2	93	1992
	dingyuanmingfu	11673	8	2	141	2006
nangang	yangguangju	2857	4	2	119	1997
	yangguangju	4500	4	1	117	1990
	jingweilou	3678	4	1	108	1989
	jingweilou	3589	4	1	80	2004
	shuimoshi	2783	4	1	105	2003
	shuimoshi	2378	4	1	83	2003
	laodongrenjia	2376	4	1	110	1989
	laodongrenjia	2379	4	1	140	2007
	hengyun	23093	6	1	110	2005
	hengyun	23094	6	1	131	1994

huayuanshangzhu	23095	6	1	102	1991
huayuanshangzhu	23096	7	1	95	1989
huayuanshangzhu	23097	8	1	142	1990
ashihe	23023	8	1	75	1997
ashihe	23034	8	1	101	2002
shifanfuxiao	23123	8	1	52	2002
shifanfuxiao	23043	8	1	92	1989
shifanfuxiao	23123	8	1	109	1998
gongshangjuxinja	5490	6	2	59	2000
gongshangjuxinja	5489	6	2	122	1994
gongshangjuxinja	5372	4	2	81	2005
gongyihuayuan	5490	4	2	71	1990
gongyihuayuan	5489	4	2	123	1987
gongyihuayuan	5372	4	2	112	2001
yidayuan	12432	6	1	66	1997
yidayuan	12378	6	1	126	1995
yidayuan	12432	7	1	133	2007
yidayuan	12378	6	1	73	1988
hexingxiaoqu	8763	6	1	66	1990
hexingxiaoqu	8783	5	1	117	1996
hexingxiaoqu	7988	6	1	84	1988
zhenxingxiaoqu	2929	5	1	141	1999
hepingtun	10762	7	1	99	1993
hepingtun	10232	7	2	49	2007
hepingtun	10234	7	2	125	1998

	dongmei	10762	7	1	144	1994
	dongmei	10232	8	1	114	2004
	dongmei	10234	7	1	89	2000
	qiaofuyangming hua	11185	7	1	80	2003
	qiaofuyangming hua	11234	7	2	60	1990
	qiaofuyangming hua	12342	7	2	56	2006
pingfa ng	hanandaxue	6207	1	3	82	1991
	hanandaxue	5798	1	3	76	1992
	shuixiumingyuan	5925	1	3	55	1987
	shuixiumingyuan	5876	1	3	148	1987

## Appendix III: SPSS result: statistics and regression model

District	平均单价(元/m <sup>2</sup> )
Daoli	10,505
Nangang	9,240
Xiangfang	8,131
Daowai	7,979
Pingfang	5,347

Descriptive statistics – House value and distance to the closet urban village

### Descriptives

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
housing value(yuan/m2)	159	2376	38461	11794.87	8683.227
distance to the closet urban village(km)	159	1	9	5.60	1.776
Valid N (listwise)	159				

Correlation between housing value and distance to the closet urban village

Correlations			
		housing value (yuan/m2)	distance to the closet urban village (km)
housing value(yuan/m2)	Pearson Correlation	1	.662**
	Sig. (2-tailed)		.000
	N	159	159
distance to the closet urban village(km)	Pearson Correlation	.662**	1
	Sig. (2-tailed)	.000	
	N	159	159

\*\* . Correlation is significant at the 0.01 level (2-tailed).



Correlations			
		housing value (yuan/m2)	number of urban villages within 10km
housing value(yuan/m2)	Pearson Correlation	1	-.107
	Sig. (2-tailed)		.178
	N	159	159
number of urban villages within 10km	Pearson Correlation	-.107	1
	Sig. (2-tailed)	.178	
	N	159	159

### Regression model

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.662 <sup>a</sup>	.438	.434	6529.937	.759

a. Predictors: (Constant), distance to the closet urban village(km)

b. Dependent Variable: housing value(yuan/m2)

Coefficients <sup>a</sup>										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	-6320.411	1717.441		-3.680	.000	-9712.682	-2928.140	1.000	1.000
	distance to the closet urban village(km)	3236.326	292.543	.662	11.063	.000	2658.498	3814.155	1.000	1.000

a. Dependent Variable: housing value(yuan/m2)

### Correlation

Correlations					
		urban village average price	Harbin housing price	number of commercial housing in the Hada urban village	number of commercial housing in Harbin
urban village average price	Pearson Correlation	1	.925**	.859*	.530
	Sig. (2-tailed)		.003	.028	.279
	N	7	7	6	6
Harbin housing price	Pearson Correlation	.925**	1	.872*	.472
	Sig. (2-tailed)	.003		.023	.345
	N	7	7	6	6
number of commercial housing in the Hada urban village	Pearson Correlation	.859*	.872*	1	.833*
	Sig. (2-tailed)	.028	.023		.040
	N	6	6	6	6
number of commercial housing in Harbin	Pearson Correlation	.530	.472	.833*	1
	Sig. (2-tailed)	.279	.345	.040	
	N	6	6	6	6

\*\* . Correlation is significant at the 0.01 level (2-tailed).  
\* . Correlation is significant at the 0.05 level (2-tailed).

## REGRESSION

```

/MISSING LISTWISE
/STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT housingvalueyuanm2
/METHOD=ENTER distancetothe closeturbanvillagekm
/SCATTERPLOT=(housingvalueyuanm2 ,*ZPRED)
/RESIDUALS DURBIN HISTOGRAM(ZRESID) NORMPROB(ZRESID).

```

## Regression result

### Notes

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Comments		
Input	Active Dataset	数据集2
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	N of Rows in Working Data File	159
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		<pre> REGRESSION  /MISSING LISTWISE  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL  /CRITERIA=PIN(.05) POUT(.10)  /NOORIGIN  /DEPENDENT housingvalueyuanm2  /METHOD=ENTER distancetothe closeturbanvi llagekm  /SCATTERPLOT=(housingvalue yuanm2 ,*ZPRED)  /RESIDUALS          DURBIN HISTOGRAM(ZRESID) NORMPROB(ZRESID). </pre>
Resources	Processor Time	00:00:02.25
	Elapsed Time	00:00:02.85
	Memory Required	2720 bytes
	Additional Memory Required for Residual Plots	680 bytes

### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	distance to the closet urban village(km) <sup>b</sup>	.	Enter

a. Dependent Variable: housing value(yuan/m2)

b. All requested variables entered.

### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.662 <sup>a</sup>	.438	.434	6529.937	.759

a. Predictors: (Constant), distance to the closet urban village(km)

b. Dependent Variable: housing value(yuan/m2)

### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5218459458.000	1	5218459458.000	122.384	.000 <sup>b</sup>
	Residual	6694492708.000	157	42640080.940		
	Total	11912952170.000	158			

a. Dependent Variable: housing value(yuan/m2)

b. Predictors: (Constant), distance to the closet urban village(km)

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	-6320.411	1717.441		-3.680	.000
	distance to the closet urban village(km)	3236.326	292.543	.662	11.063	.000

### Coefficients<sup>a</sup>

Model		95.0% Confidence Interval for B		Collinearity Statistics	
		Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	-9712.682	-2928.140		
	distance to the closet urban village(km)	2658.498	3814.155	1.000	1.000

a. Dependent Variable: housing value(yuan/m<sup>2</sup>)

### Collinearity Diagnostics<sup>a</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions	
				(Constant)	distance to the closet urban village(km)
1	1	1.953	1.000	.02	.02
	2	.047	6.479	.98	.98

a. Dependent Variable: housing value(yuan/m<sup>2</sup>)

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-3084.08	22806.53	11794.87	5747.019	159
Residual	-10594.199	25363.453	.000	6509.240	159
Std. Predicted Value	-2.589	1.916	.000	1.000	159
Std. Residual	-1.622	3.884	.000	.997	159

a. Dependent Variable: housing value(yuan/m2)

### Charts

DESCRIPTIVES VARIABLES=housingvalueyuanm2 distancetotheclouseturbanvillagekm

/STATISTICS=MEAN STDDEV MIN MAX.

### Descriptives

#### Notes

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Comments		
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	N of Rows in Working Data File	159
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.

Syntax		DESCRIPTIVES VARIABLES=housingvalueyuan m2 distancetotheclaseturbanvi llagekm  /STATISTICS=MEAN STDDEV MIN MAX.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
housing value(yuan/m2)	159	2376	38461	11794.87	8683.227
distance to the closet urban village(km)	159	1	9	5.60	1.776
Valid N (listwise)	159				

### CORRELATIONS

/VARIABLES=housingvalueyuanm2 distancetotheclaseturbanvillagekm

/PRINT=TWOTAIL NOSIG

/MISSING=PAIRWISE.

### Correlations

#### Notes

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Comments		
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	159
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.
Syntax		CORRELATIONS  /VARIABLES=housingvalueyuanm2 distance to the closet urban villagekm  /PRINT=TWOTAIL NOSIG  /MISSING=PAIRWISE.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.04

### Correlations

		housing value(yuan/m2)	distance to the closet urban village(km)
housing value(yuan/m2)	Pearson Correlation	1	.662**
	Sig. (2-tailed)		.000
	N	159	159
distance to the closet urban village(km)	Pearson Correlation	.662**	1
	Sig. (2-tailed)	.000	



N	159	159
---	-----	-----

\*\* . Correlation is significant at the 0.01 level (2-tailed).

#### CORRELATIONS

/VARIABLES=housingvalueyuanm2 numberofurbanvillageswithin10km

/PRINT=TWOTAIL NOSIG

/MISSING=PAIRWISE.

### Correlations

#### Notes

Output Created		02-JUL-2018 11:10:27
Comments		
Input	Active Dataset	数据集2
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	159
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.

Syntax		CORRELATIONS
		/VARIABLES=housingvalueyuan/m2 numberofurbanvillageswith in10km
		/PRINT=TWOTAIL NOSIG
		/MISSING=PAIRWISE.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02

### Correlations

		housing value(yuan/m2)	number of urban villages within 10km
housing value(yuan/m2)	Pearson Correlation	1	-.107
	Sig. (2-tailed)		.178
	N	159	159
number of urban villages within 10km	Pearson Correlation	-.107	1
	Sig. (2-tailed)	.178	
	N	159	159

GET DATA

/TYPE=XLSX

/FILE='C:\Users\MIX\Desktop\相关.xlsx'

/SHEET=name 'Sheet1'

/CELLRANGE=FULL

/READNAMES=ON

/DATATYPEMIN PERCENTAGE=95.0

/HIDDEN IGNORE=YES.

EXECUTE.

DATASET NAME 数据集3 WINDOW=FRONT.

CORRELATIONS

```
/VARIABLES=urbanvillageaverageprice Harbinhousingprice  
    numberofcommercialhousingintheHadaurbanvillage  
numberofcommercialhousinginHarbin  
  
/PRINT=TWOTAIL NOSIG  
  
/MISSING=PAIRWISE.
```

## Correlations

### Notes

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Comments		
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	7
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.

Syntax		CORRELATIONS
		/VARIABLES=urbanvillageaverageprice Harbinhousingprice  numberofcommercialhousingintheHadaurbanvillage numberofcommercialhousinginHarbin
		/PRINT=TWOTAIL NOSIG
		/MISSING=PAIRWISE.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02

### Correlations

		urban village average price	Harbin housing price	number of commercial housing in the Hada urban village
urban village average price	Pearson Correlation	1	.925**	.859*
	Sig. (2-tailed)		.003	.028
	N	7	7	6
Harbin housing price	Pearson Correlation	.925**	1	.872*
	Sig. (2-tailed)	.003		.023
	N	7	7	6
number of commercial housing in the Hada urban village	Pearson Correlation	.859*	.872*	1
	Sig. (2-tailed)	.028	.023	
	N	6	6	6
number of commercial housing in Harbin	Pearson Correlation	.530	.472	.833*
	Sig. (2-tailed)	.279	.345	.040

N	6	6	6
---	---	---	---

### Correlations

		number of commercial housing in Harbin
urban village average price	Pearson Correlation	.530
	Sig. (2-tailed)	.279
	N	6
Harbin housing price	Pearson Correlation	.472
	Sig. (2-tailed)	.345
	N	6
number of commercial housing in the Hada urban village	Pearson Correlation	.833*
	Sig. (2-tailed)	.040
	N	6
number of commercial housing in Harbin	Pearson Correlation	1
	Sig. (2-tailed)	
	N	6

\*\* . Correlation is significant at the 0.01 level (2-tailed).

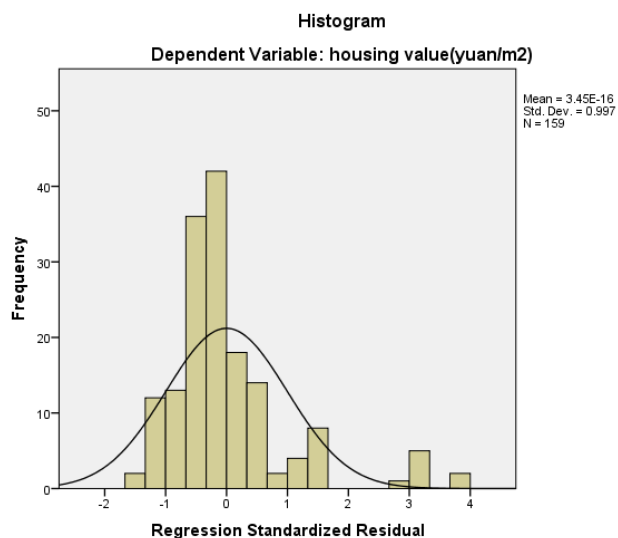
\* . Correlation is significant at the 0.05 level (2-tailed).

Before the model can be used for the explaining the variation in general satisfaction in winter in the population, several regression conditions that should be satisfied should be checked. The conditions are:

- All variables should be at least of interval level of measurement;
- All relations are linear;
- The values of dependent variable are normally distributed for fixed values of independent variables;
- The variances of dependent variable are equal for all fixed values of independent variables;

As previously mentioned, the first two conditions have been satisfied by recoding categorical variables using dummy variables, and variable transformation for non-linear relation, respectively. To assess whether the values are normally distributed, a set of histogram and normal probability plot showing the distribution of residuals can be explored.

The histogram and plot, as shown in Figures 19 and 20, confirm the normality of the distribution, and thus the condition of normal distribution of values of dependent variable are satisfied.



year	urban village average price	Harbin housing price	number of commercial housing in the Hada urban village	number of commercial housing in Harbin
2008	2000	4380	13	41000
2010	3200	4820	19	43000
2012	4800	5280	23	55000
2014	5200	6600	34	63456
2016	5500	7362	45	88863
2017	6300	8450	35	47012
2018	7000	10000		

