



Implementation Challenges of State-Led Redevelopment in Shrinking Cities: Case Study of Shantytown Redevelopment in Yichun, Northeast China

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Abstract: Unlike shrinking cities in Western countries enduring prolonged disinvestment due to market liberalism, some of their counterparts in Northeast China are undergoing drastic redevelopment under state capitalism. However, the challenges and effects of implementing such redevelopment in shrinking cities remain to be seen. This study examined a specific state-led *shantytown* (quasi-formal settlement) redevelopment policy entitled “Regulation Methods on Shantytown Redevelopment in State-Owned Forestry Areas” that was designed and implemented in state-owned forestry areas beginning in 2010 to construct affordable housing and compensate local residents adversely impacted by the logging ban initiated in 2000. The study analyzed the implementation of this policy in Yichun, a shrinking forestry city in China’s rust belt (Northeast China). The implementation of this policy differs from China’s typical privately funded market-led redevelopment in other areas, in terms of combining the rigorous implementation of central government’s policy and funding in tandem with the discretionary actions of the local state-owned forestry bureau. Although the *Regulation Methods* policy has improved the living conditions of participating families’, it has been only partially implemented and is facing three major challenges: the unstable partnership between different tiers of government, social resistance from grassroots, and overdraft of local credibility and capability. This study concluded that the Yichun case represents a case of problematic state-led redevelopment (analogous in some ways to US postwar urban renewal) where state planning power does not adequately address public needs, particularly household socioeconomic considerations and thus will not save shrinking cities from population decline. DOI: [10.1061/\(ASCE\)UP.1943-5444.0000661](https://doi.org/10.1061/(ASCE)UP.1943-5444.0000661). © 2021 American Society of Civil Engineers.

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Introduction

Can shrinking cities be saved by urban redevelopment and revitalization? This is a challenging question that many urban scholars and planners are keen to answer. Generally, shrinking cities are difficult redevelopment cases, considering the limited cost efficiency of construction in an oversupplied housing market after long-term population decline. Due to the downward spiral, the free flow of capital keeps fleeing shrinking cities, and accumulated disinvestment causes the ever-greater socioeconomic problem. This is particularly the case in countries with a neoliberal regime (Smith et al. 2001; Peck 2012). It seems that shrinking cities are unlikely to attract reinvestment to achieve revitalization. However, is it the case in China?

In contrast to the *laissez-faire* economic liberalism in the Western World, China’s state capitalism regime strictly regulates

regional disparities and the emergence of shrinking cities, both of which contradict communist ideology (Aligica and Tarko 2012; Chung et al. 2009). After the 2008 global economic crisis, China responded with a 4 trillion RMB (Ren Min Bi, or yuan, China’s currency) economic stimulus package (Bremmer 2010), among which 13% (520 billion RMB) was appropriated to subsidize affordable housing development (Naughton 2009). In this wave of state-led urban construction, Northeast China became the major target for the central government.

With the moniker of *China’s eldest son* and the *cradle of China’s industry* (Eckstein et al. 1974; Chung et al. 2009), Northeast China was once the most developed and industrialized area in the country due to its abundant resources (Liu et al. 2014), comparatively few natural disasters (Ye et al. 2012), early 20th century investment from Japan as a colony, and 1950s Soviet investment as an adjacent country, the model for P.R. China’s socialism (Eckstein et al. 1974). However, following the Sino-Soviet split in the late 1950s, a number of geopolitical factors had harmful impacts on Northeast China’s development. These included *Third Front* decentralization of industry from Northeast China to Western China in the 1960s and 1970s (Naughton 1988); the shifting of regional investment priorities away from Soviet-bordering provinces to eastern coastal regions, following the late 1970s Sino-US rapprochement (Lin 1999); and unstable geopolitical conditions in neighboring countries of Russia and North Korea beginning in the 1990s (Marton et al. 1995; Cotton 1996). As a result, Northeast China today [2020] has a new moniker, that of the *Chinese Rust Belt* (Hurst 2004; Xie et al. 2016). In the 21st century, the region has become known for its large-scale layoffs and social unrest (Lee 2000; Hurst 2004),

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for the decline of state-owned enterprises (Geng and Weiss 2007), for resource depletion and environmental pollution (Li et al. 2015), and for population and economic decline in the region's now-shrinking cities (He et al. 2017; Gao and Long 2019).

To address these issues, a policy decree entitled *Revive the Northeast* was released in 2003. It aims to reprioritize Northeast China in the central government's regional development strategies. Urban redevelopment, particularly residential or *shantytown* redevelopment of affordable housing (hereafter *shantytowns*) in shrinking cities and declining neighborhoods, is a centerpiece of subsequent policies, including the aforementioned 4 trillion RMB post-2008 economic stimulus package (Ni et al. 2015, p. 96). In Northeast China, the policy led to the resettlement of millions of urban families from one-story, single-family shanties to modernized multistory condominiums.

Examining the scale and ambition of Northeast China's shantytown development, one is led to think of postwar urban renewal in the United States, perhaps the most famous example of state-led housing redevelopment. The urban renewal targeted urban shrinkage and occurred in tandem with suburbanization, draining middle-class residents from cities. The resulting new housing failed to raise residents' socioeconomic status, and many considered this slum demolition movement to have only built new slums in their place (Vale 2002, 2013). US urban renewal has been judged to be a state-led redevelopment process that was top-down in its governance structure, physically deterministic (prioritizing new housing instead of new jobs), and insensitive of residents' needs and perspectives. However, is history repeating itself in China's shantytown redevelopment?

To partially answer this broad question, this study was framed by the following more detailed questions. How is state-led redevelopment occurring in shrinking cities from Northeast China? Which elements of this state-led policy appear to be successful, which elements appear to be unsuccessful, and why? What similarities or differences can be identified between Northeast China's state-led redevelopment and other cases of state-led redevelopment for saving shrinking cities, such as US urban renewal or Germany's *Stadtumbau Ost*? Examining Northeast China, one could postulate two hypotheses: one, urban renewal is repeating itself; or second, China has found a new model for successful redevelopment of shrinking cities.

This study explored these research questions and hypotheses by conducting a case study of shantytown redevelopment in Yichun, a shrinking city in China's Northeast province Heilongjiang. Yichun has specific features that justify its selection as a case and its importance to planning scholarship. Most current studies on Chinese cities emphasize only urban growth (Wu and Yeh 1999; Perlstein and Ortolano 2015; Smith 2018), while shrinking cities are less studied. Yichun is an extreme counterexample of the urban growth prevailing in China. Most of Yichun's districts have lost more than 20% of their residents since 1990, making it one of the fastest shrinking cities in China (Gao and Long 2019). Additionally, since most of Yichun's area is mountainous and there is no pre-existing rural population, Yichun is a migrant city, with a very high urbanization level of 86.23% in 2010, placing it at the top among all Chinese cities (NBS 2012). Yichun likely becomes less exceptional among Chinese cities in the future due to nationwide aging, decreasing fertility rates, growing regional disparities, and weakening urbanization growth (Long and Gao 2019). Therefore, Chinese planners and scholars could consider the Yichun case a heuristic to prepare for corresponding strategies toward other emerging shrinking cities.

Additionally, given their proximity to Russia, Yichun and other Northeast Chinese cities have a similar transitional economy to other post-Soviet shrinking cities, such as Gdańsk in Poland (Tölle 2008), Valea Jiului in Romania (Constantinescu 2012), and Belgrade in Serbia (Antonić and Djukić 2018). Moreover, for developing

nations with urban informality (e.g., Brazil and India), the Yichun case may provide an example of whether it is worthwhile to adopt top-down demolition and rebuilding of underclass residential areas. The Yichun case may also have value for planning scholars in the Western world, not just as an *exotic* Chinese city but as a meaningful reference for the viability of shrinking cities planning strategies more broadly. Urban scholars (e.g., Hackworth 2014; Dewar 2015) have called for stronger public intervention toward shrinking American cities suffering from persistent disinvestment under neoliberalism. However, they may not know what will happen in shrinking cities if the public overly intervenes in the redevelopment and housing market. Yichun is also meaningful compared to cities in the former eastern Germany, where the *Stadtumbau Ost* program reinvested in declining towns through redevelopment and demolition in a manner of partnership among federal, state, and local governments (Wiechmann 2008). Ultimately, whether the Yichun case proves a good example of how to deal with urban crises in a postsocialist declining city remains to be seen.

Understanding State-Led Shantytown Redevelopment in Shrinking Cities

Chinese Shantytowns and Their Distinctive Features

Urban informal developments, which accommodate poor city-dwellers around the world, are difficult to define clearly because they may differ in tenure, legitimacy, infrastructure, amenities, and building quality. The earliest public attention toward informal development occurred in tandem with industrialization and urbanization in the 19th century Victorian era in the United Kingdom, where the term *slum* was used to describe extremely high density and low sanitary-level working class residences (Yelling 2012). In the 20th century, urban informal development was a major policy focus in some developing countries, where social stratification and polarization reflected uneven economic growth. Terms such as low-income housing, irregular settlements, informal settlements, or spontaneous settlement were all applied to these developments (Huchzermeyer 2003; Neuwirth 2016; Patton 1988; Wigle 2014). The meaning and even implications of these terms remain somewhat ambiguous, and many have remained contentious (Gilbert 2007).

In China, three terms are used to describe urban informal development: urban migrant enclaves, urban villages, and shantytowns. The distinctions between these terms are the following. An *urban migrant enclave* refers to a spatial agglomeration of domestic migrants and international immigrants living and working together who share a similar geographical, cultural, or ethnic identity. This term does not have a spatial or morphological meaning or implication (Zhou 2010). This being said, urban migrant enclaves are often low-quality, quasi-self-built housing agglomerations, for example, Beijing's Xinjiang Village (Ma and Xiang 1998) and Zhejiang Village (Liu and Liang 1997). However, these urban migrant enclaves may also be modern, formally constructed housing communities such as Wangjing Koreatown, even in Beijing (Jeong 2014).

Urban villages, on the other hand, reflect a general morphologically consistent informal phenomenon in Chinese cities. Urban villages, typically self-built by rural-dwellers, often have poor building quality and outdated facilities and infrastructure than urban formal residences (Wang 2016, p. 10). They are found within areas of large Chinese cities that were once rural areas. Formerly located on the outskirts of the urban area, urban villages gradually became surrounded by built-up areas. Urban villages often emerged in fast-growth megacities with comparatively weak administrative regulations such as Shenzhen (Wang et al. 2009) or Guangzhou (Lin et al. 2011), both

in the southern Pearl River Delta area of China. Because of their low rents, some urban villages became ideal residences for incoming urban dwellers, some of whom shared social backgrounds and thus self-segregated in the same urban village. In such cases, urban villages become similar to, or are even synonymous with, urban migrant enclaves (Zhang 2005).

At last, *shantytowns* comprise housing areas constructed by state-owned enterprises or by workers themselves during rapid industrialization in the latter half of the 20C by state-owned enterprises. While such state-owned enterprises were functioning, shantytowns functioned as dormitories for workers, and consequently, they were located in proximity to their *owner* state-owned enterprises in the same manner as worker housing in the former Soviet Union. Together the shantytowns and state-owned enterprises formed a *work unit* or *danwei*. While danweis include a wider variety of physical housing morphologies, generally four to five story multifamily concrete or brick structures, shantytowns are one-story, often but not always attached, and found in lower-density, smaller city locations, such as Yichun. In conclusion, the term *urban migrant enclaves* stresses its sociological meaning. While urban migrant enclave building qualities vary, some may be built formally with very high quality. *Urban villages'* most specific morphological feature is their informality, self-built, and built mostly by rural-dwellers. While *shantytowns* may be low-quality construction, they have been built formally, possess legal status, and therefore do not belong to the category of urban informality.

More specifically, Chinese shantytowns have particular features that make them unusual among other forms of both Chinese and international urban informality:

- They are built on state-owned land.
- The residents possess an urban household registration (Hukou).
- The residents accordingly have a legitimate right to use, and tenure of, their properties, though in some cases illegal building may exist in the form of covertly constructed additional living space.
- The residents are current or former industrial workers and were once prosperous before the rise of the market economy.
- Most of the state-owned enterprises that built the shantytowns have gone through financial trauma or bankruptcy or have merged and consolidated through privatization.
- Today's residents, as employees of either current or former state-owned enterprises, have relatively low incomes and mobility and are therefore often confined to shantytowns.
- Most residents are unsatisfied with their current living and working status (He and Wu 2005; Ni et al. 2015, p. 9; Wang 2016, p. 11).

Urban Redevelopment and Its Relation to Shrinking Cities

Although shrinking cities around the world share phenomena such as depopulation (Beauregard 2009), economic decline (Großmann et al. 2013), and urban decay (Deng and Ma 2015), policy resolutions to these cities' problems vary among countries. In the United States, although large-scale urban redevelopment is rare in today's shrinking cities (Ryan 2012), the urban renewal of the mid-20th century provided substantial amounts of new affordable housing in most shrinking cities. Triggered by the Housing Act of 1949 and the amended Housing Act of 1954, American cities underwent two decades of reconstruction funded by federal grants, just as many shrinking cities started to lose population (Weber 2002). Contemporary scholars found that urban renewal goals were challenging to achieve and also created many thorny problems. Anderson's (1964) fruitful study initiated a wave of criticism toward American urban renewal and the resulting large-scale resident relocation. Scholars' critiques

(Gans 1965; Hartman 1964; Vale 2002, 2013) were that (a) housing improvement was achieved at a heavy public cost and that the private sector could accomplish the same at a lower cost; (b) relocation did not necessarily improve social and economic status, instead of creating new slums; and (c) neighborhood clearance efforts adversely impacted some ethnic groups (especially African-Americans) more than others. The Housing and Community Development Act of 1974 ended large-scale, government-driven urban redevelopment in the United States, replacing it with a new era of community-led, bottom-up piecemeal initiatives, among which the most well-known one is Community Development Block Grant (CDBG; Ryan 2012). Today, except for the demolition of abandoned and vacant properties, large-scale redevelopment is beyond the power of impoverished local governments in shrinking American cities.

The end of government-driven urban redevelopment in the United States was not reflected elsewhere, except in the similarly neoliberal United Kingdom, a nation linked to the United States by culture if not by geography. In Germany, however, both the timing and policy response to shrinking cities were notably different. In former eastern Germany, after 2004, a federally led redevelopment program named *Stadtumbau Ost* (Redevelopment East) drastically changed the urban landscape in shrinking cities in an effort to prevent further deterioration. Reflecting a fiscal and policy partnership between Germany's federal, state, and local governments, *Stadtumbau Ost* reduced housing oversupply in many shrinking cities through large-scale demolition and redevelopment. In eastern Germany, the demolition targets were prefabricated multifamily housing built under state socialism (1948–1989) (Radzinski 2016). Some have interpreted this demolition and redevelopment as having ideological and political aims of dismantling the unwanted socialist past (Gribat 2010). While some scholars (Bernt 2009) have pointed out drawbacks of Germany's shrinking-city strategies, such as the goal of regaining housing market equilibrium without regard to development, and with a limited focus on downtown areas, it remains difficult to deny the positive effects that German efforts have had on improving the physical environments and stabilizing the depopulation of the country's shrinking cities.

The regime of urban redevelopment in shrinking cities also varied with process and outcome in countries with distinct political, economic, and social background. The current prevailing US redevelopment programs (e.g., Hardest Hit Funding) represent a highly decentralized strategy toward urban vacancies and abandonment: municipalities compete with each other for federal and state money (Joice 2011). While the Germany's *Stadtumbau Ost* is a good example of the top-down regime with partnership between federal, state, and municipal government: urban redevelopment projects are equally funded by the three sectors. However, although Russia also has a strong top-down regime like Germany, its Siberian cities had little capability to regulate/redevelop shrinking and illegal settlements in suburban areas (Antonić and Djukić 2018).

Redevelopment in China: Market-Driven Versus Government-Driven

Urban redevelopment in China can be mainly separated into two categories according to the applicable driving forces, either market-driven or government-driven. In most studies, the former is viewed as a means of growth promotion, while the latter is regarded as a means of social welfare provision (He and Wu 2005, 2009). Since China's marketization of state-owned urban land in the late 1980s, land value has played an ever-growing role in urban (re)development. With the rise of neoliberalism and local entrepreneurialism in China, local governments in developed cities have been facilitating the redevelopment of well-located but dilapidated

shantytowns (He and Wu 2009). Developers have taken an interest in this redevelopment since they wish to extract value from urban (re) development and establish good relationships with the government. Together, these developer–government alliances are considered as *growth coalitions*, which increase housing supply by demolishing shanties and replacing them with high-rise residential towers, catering to the increasing housing demand and economic growth (Shin 2009; Ye 2011). However, other shantytowns in less developed cities and areas have been left intact because their low market value cannot generate incentives for either developers or the government to redevelop them. In this way, they are similar to the vacant, abandoned houses of shrinking American cities. Not until the central government released a nationwide shantytown redevelopment policy in 2009, mainly as a part of the nation's economic stimulus package, did shantytowns in lower market value areas finally have the opportunity for redevelopment. Since then, through coalition funding from different tiers of government, such shantytowns have undergone substantial redevelopment and have been rebuilt as contemporary affordable housing. This transformation reflects China's *state capitalism*, under which markets are viewed as a tool to serve national interests (Bremmer 2010).

Despite the differences in their drivers, market-driven redevelopment and government-driven redevelopment are not distinctly clear-cut in other aspects. Government-driven redevelopment and its result, affordable housing, are not always or not only for public welfare: other motivations include economic growth and achievement of political goals. Wang and Murie (2011) found that Chinese affordable housing policies' major role was, in fact, to stimulate economic growth instead of enhancing social welfare since the central government initiated many of these policies only after an economic crisis. For example, after the 1997 Asian financial crisis, China's central government initiated the Economic and Comfortable Housing (ECH) program to create affordable housing, with the aim of promoting domestic consumption (Wang 2001). Other scholars have found inconsistency of affordable housing policies between central and local governments because growing decentralization has increased local government discretion regarding policy implementation (Huang 2012; Zou 2014). In addition, the current affordable housing policy is exclusive, only catering to certain social groups and thereby excluding others who do not have urban household registration in that city, similar to the property purchasing limitations in some Chinese cities (Huang 2012).

During the last two decades, from the perspectives of social inequality, real estate economics, etc., many studies have examined diverse subcategories of affordable housing, including the peaceful living project (PLP), economic and comfortable housing (ECH), cheap-rent housing (CRH), price-cap housing (PCH), and public rent housing (PRH) (Wang 2001; Wang and Murie 2011; Deng et al. 2011; Huang 2012; Zou 2014). However, few studies have examined top-down housing redevelopment as a model for planning shrinking Chinese cities. It is this gap in the literature that this study aims to address. We specifically focus on two questions within a redevelopment process that hardly engaged with the market. First, under China's top-down regime, how did different tiers of government establish a coalition to fund the large-scale shantytown redevelopment in shrinking cities; and second, how did an impoverished local government and involved families achieve this unprecedented scale of construction and relocation?

Research Method

For this study, we examined a spatially isolated shrinking city named Yichun in China's Northeastern Heilongjiang Province (Fig. 1) in

order to address the study research questions (Introduction). The study first reviewed urban informalities and their three distinct representations (urban villages, urban ethnic enclaves, and shantytowns) in China, as well as the features that make shantytowns distinct. Subsequently, the study reviewed state-led urban redevelopment in the context of shrinking cities, as well as China's two formats of urban redevelopment, market-driven and government-driven redevelopment. Subsequently, the study built a theoretical framework by analyzing state-level redevelopment policies as they were implemented in Yichun, the study case city. The study reviewed the challenges of implementing state-led redevelopment in Yichun from three distinct but also interrelated perspectives. At last, the study discussed challenges of top-down urban redevelopment in regard to shrinking cities, as well as possible remedies to these challenges.

This study utilized qualitative research methods to answer its research questions. Yichun is a comparatively small and isolated city, and thus, much study information was only available from local informants. To better understand the implementation process of shantytown redevelopment, multiple local informants were interviewed in 2016 summer, when one of the authors was residing in Yichun (see more about the interviewees in the Appendix). Open-ended interviews were conducted with 11 government officials in the prefectural-level Urban and Rural Planning Bureau, Land Resource Bureau, and Housing and Urban–Rural Development Bureau. Additional interviews were conducted with one government official in the county-level Housing and Urban–Rural Development Bureau of Youhao District and with the chief urban planner of Yichun's Urban Planning and Architectural Design Institute (an individual who effectively served as the city's major urban planning contractor). The aforementioned interviews effectively constituted the majority of local and regional officials knowledgeable about shantytown redevelopment policy in the city. To understand residents' perceptions, several groups of residents were interviewed: 3 residents, 5 residents, and 2 groups of residents (8 and 14) in Wumahe District, Cuiluan District, and Youhao District, respectively, together with several residents in the Yilin state-owned forestry farm, in Wumahe District. While additional resident interviews may have been potentially advantageous to the study, the numbers of resident interviews were limited by time and resource constraints. To provide supplementary and contextual information on forestry shantytown redevelopment policy, documentaries, local online print chronicles, and archives were reviewed, together with ancillary qualitative research that included site documentation and participant observation of Yichun's forestry shantytown redevelopment sites. The authors conducted a second study visit in January of 2019 to observe the progress of redevelopment in the aforementioned districts of the city.

Shantytown Redevelopment Policies in China: Case of Yichun

State-Led Shantytown Redevelopment Policies in China

Since 2005, the central government has issued four major shantytown redevelopment policies (Table 1). To avoid confusion due to similarities in these names, we labeled these policies as *Northeast China Redevelopment*, *Reclamation Areas Redevelopment*, *Forestry Areas Redevelopment*, and *Urban-Mining-Areas Redevelopment*. Apart from the policy of *Northeast China Redevelopment*, released in 2005 and revoked in 2011 (Ministry of Housing and Urban–Rural Development 2005, 2011), the other three policies are still in effect. These three policies were released almost at the same time, after the unprecedented 520 billion RMB affordable housing program was launched nationwide in 2009. Two of the

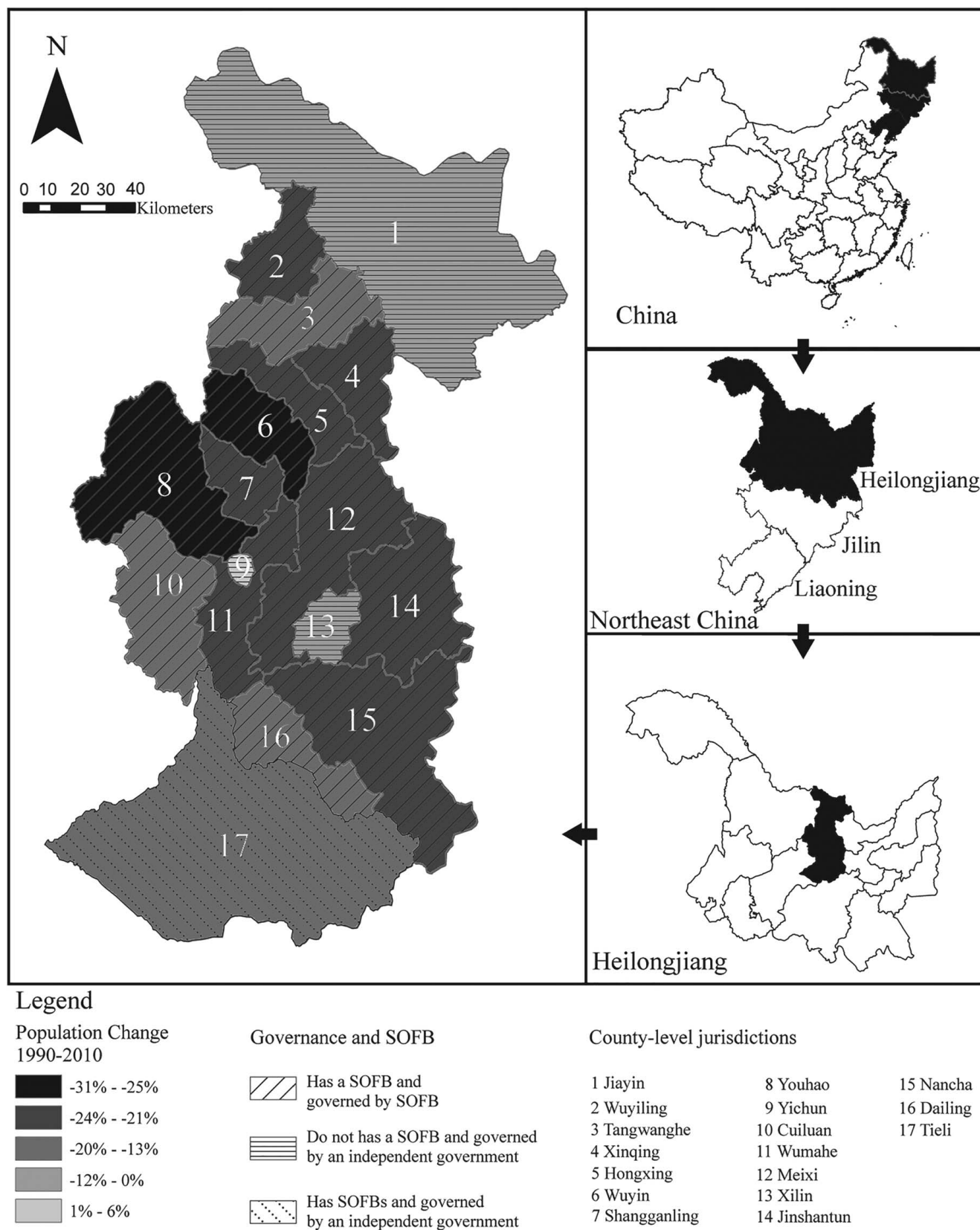


Fig. 1. Location of Yichun, with population change and local governance structure.

redevelopment policies are nationally applicable, whereas the *Northeast China Redevelopment* and *Reclamation Areas Redevelopment* policies are, or were, applicable only in limited areas of China (Table 1). Two of the shantytown redevelopment policies,

Reclamation Areas Redevelopment and *Forestry Areas Redevelopment*, have clear subsidy standards, with the latter having a much higher subsidy standard. Similarly, only these two policies provide clear guidelines and regulatory controls on resettlement housing.

Table 1. Major shantytown redevelopment policies

Policy name	Released year	Current effectiveness	Released agencies	Responsible agencies	Target area	Subsidy standard	Resettlement housing standard
Guiding opinions on promotion of Shantytown redevelopment in Northeast China [aka Northeast China redevelopment]	2005	No, revoked in 2011	Ministry of Construction (renamed as Ministry of Housing and Urban–Rural Development in 2008)	Ministry of Construction (renamed as Ministry of Housing and Urban–Rural Development in 2008)	Shantytown in former state-owned coalmine area within Northeast China	No clear standard	No clear standard
Regulation methods on the redevelopment of Shantytowns in state-owned forestry areas [aka forestry areas redevelopment]	2010 (Trial regulation released in 2009)	Yes	State Administration of Forestry	State Administration of Forestry, National Development and Reform Commission, Ministry of Land and Resources, Ministry of Housing and Urban–Rural Development	Shantytown in state-owned forestry area nationwide	Each family has 15,000 RMB subsidy from central government, no less than 10,000 RMB subsidy from the provincial government	Each family's resettlement housing can have a maximum area of 50 m ² for governmental subsidy
Opinions on promoting redevelopment of Shantytowns in state-owned reclamation areas [aka reclamation areas redevelopment]	2009	Yes	Ministry of Agriculture	Ministry of Agriculture, National Development and Reform Commission, Ministry of Land and Resources, Ministry of Housing and Urban–Rural Development	Shantytown in state-owned reclamation area within Heilongjiang, Inner Mongolia, Guangdong and Yunnan	Each family has around 7,500 RMB subsidy (adjust a little around this number in different provinces) from central government, around 15,000 RMB in total from every level of government	Each family's resettlement housing can have a maximum area of 60 m ² for governmental subsidy
Guiding opinions on promotion of Shantytown redevelopment in urban areas and state-owned mining areas [aka urban-mining-areas redevelopment]	2009	Yes	Ministry of Housing and Urban–Rural Development	Ministry of Housing and Urban–Rural Development, National Development and Reform Commission, Ministry of Finance, Ministry of Land and Resources, People's Bank of China	Shantytown in urban area and state-owned mine area nationwide	No clear standard	No clear standard

This also implies that the municipalities implemented these policies with a higher level of conformance than the other policies. On the other hand, the *Reclamation Areas Redevelopment* policy applies only to four provinces, making this policy less influential than the *Forestry Areas Redevelopment* policy and hindering its impact. Based on these considerations, this study chose “Regulation Methods on the Redevelopment of Shantytowns in State-owned Forestry Areas,” also known as the *Forestry Areas Redevelopment* policy, for further detailed analysis.

Yichun Case

Located in the northern part of Heilongjiang Province, Yichun is a prefectural-level city that shares its northern border with Russia. Abundant forestry resources provide the city’s nickname, *the forest capital*. These forests may be found covering the Lesser Khingan Mountains that comprise most of the city’s territory. Before the 20th century, the area was thinly populated, with nomadic Tungusic peoples moving through the area, but no large settlements (Pulford 2017). Yichun was founded in the 1950s when central and provincial governments mandated Han settlers to move into the area to exploit forests for socialist industrialization. To administer and operate forestry operations, the Heilongjiang provincial-level forestry bureau established 19 state-owned forestry bureaus (SOFBs) in Yichun (two SOFBs were separately merged with two other SOFBs in 1965 and 1969, respectively, leaving 17 today). In a socialist fashion, since the companies were state-owned and also effectively constituted local government in an otherwise thinly populated region, residents were heavily dependent on the state. Most employees of Yichun are either working currently for, or once worked for, an SOFB (Local Chronicle Bureau of Yichun 1993).

Governance in Yichun is dominated by SOFBs. Of Yichun’s 17 county-level jurisdictions, 13 are governed by SOFBs (Fig. 1). These combine their commercial function with a county-level district government. While there are 17 SOFBs and jurisdictions, only 13 are combined. There are, therefore, four nonadministrative SOFBs and four jurisdictions with no SOFBs. Four SOFBs in Tieli jurisdiction are commercial only since they are relatively small. Also, four county-level jurisdictions without SOFBs have diverse governance in light of their nonforestry industries (Jiayin—agriculture, Yichun—administrative, Xilin—steel, and Tieli—mixed). This diverse governance is typical of Chinese jurisdictions. Yichun also combines forestry with governance at the prefectural level. Yichun’s prefectural-level forestry administration bureau, located in a county-level district named Yichun, combines its commercial function with a second function of prefectural-level city government. Thus, Yichun’s prefectural-level forestry administration bureau is in charge of not only Yichun’s 17 SOFBs but also of Yichun’s 17 county-level jurisdictions.

Yichun is ultimately a city governed by the state forestry industry, among which the major subindustry, lumbering, is being phased out due to the ever-growing and strict Natural Forest Conservation Program (NFCP). As a result, Yichun can be considered a *shrinking city*. Around the world, many once-thriving resource-based cities whose resources become overexploited or obsolete have become shrinking cities (Martinez-Fernandez et al. 2012). Yichun is not the first forestry-based city to decline: in Finland’s forestry city Lieksa, mechanization and international redistribution of resource exploitation led to the city’s decline (Kotilainen et al. 2015). Yichun experienced high economic and population growth before changes in the forestry industry brought about its subsequent decline. Since the 1980s, Yichun has faced resource depletion and economic hardship. The city’s economy declined further after the launching of the NFCP in 2000, a government decree that placed a gradual logging ban on

Yichun and other forestry cities in the interest of environmental preservation. From 1998 to 2009, Yichun’s cubic volume of logging dropped from 2,280,000 to 1,324,000 m³, declining to zero by 2014 (Yichun Municipal Government 1999, 2011). Depopulation accompanied Yichun’s economic hardships. The city’s population decreased 15% between 1990 (1,358,178 residents) to 2010 (1,148,126 residents), and Yichun’s 13 forestry county-level jurisdictions’ (submunicipal level administrative divisions) population decreased at a proportionally greater rate, down 23% from 1990 (689,429 residents) to 2010 (531,483 residents) (NBS 1994, 2012).

Since 2009, Yichun has been subject to two different shantytown redevelopment policies. All of Yichun’s 13 forestry county-level jurisdictions, plus the four noncounty level SOFBs in Tieli, are subject to the *Forestry Areas Redevelopment* policy described earlier. This policy, as previously stated, provides extensive redevelopment subsidies. Three additional county-level jurisdictions (Jiayin, Xilin, and Yichun), plus the area of Tieli outside of its four SOFBs, are subject to the *Urban-Mining Areas Redevelopment* policy, which provides lesser redevelopment subsidies. This paper solely focuses on the *Forestry Areas Redevelopment* policy since the other program is more market-oriented and only implemented in relatively well-off places.

Defined by SFA (2010), forestry shantytowns are neighborhoods in a state-owned forestry area where more than 50% of the housing consists of shanties (most shanties are a one-story terrace, or row houses in urban areas and one-story detached houses, or cottages, in rural areas). Shanties have poor infrastructure, low hygienic conditions, extremely narrow access roads, and high fire and crime risk (SFA 2010). There are two types of forestry shantytowns in Yichun, differing only in their geographical location. First is the residential areas of state-owned forestry farms (SOFFs) or rural areas. The SOFF is the basic forestry industry unit of the SOFB, and each has a similar land area (Fig. 2). The sample Cuiluan District shown in Fig. 2 has eight SOFFs with a total population of 44,960 (2010). The second type of shantytowns is residential shacks within urban areas. There are two such urbanized areas in the sample Cuiluan District shown in Fig. 2 (eight and nine districts), and the rest eight areas each have a forestry farm. All of the county-level districts of Yichun city follow this basic pattern of a large urban settlement surrounded by more lightly populated forestry farms. A high percentage of residential buildings in these forestry districts is considered shantytowns, according to our study interviews with local officials, although there are also some newly built residential buildings in urbanized areas of the forestry jurisdictions that do not qualify as shantytowns. In Yichun, these two types of shantytowns (effectively *rural* and *urban* shantytowns) are subject to two distinct redevelopment strategies. Rural shanties with legal titles in SOFFs are mostly subject to retrofitting (Fig. 3), while urban shantytowns are subject to demolition and resettlement of their residents, who are relocated from one-story single-family terrace houses to middle-rise multifamily apartments (Fig. 4).

Findings: Challenges of Implementing Shantytown Redevelopment in Yichun

Unstable Partnerships between Different Tiers of Government

Distinct from the market-oriented urban redevelopment typical of Chinese cities, government-led shantytown redevelopment in Yichun and elsewhere remains under the fiscal and administrative control of multiple tiers of government. The management and governance of shantytown redevelopment can be conceptualized as a specific

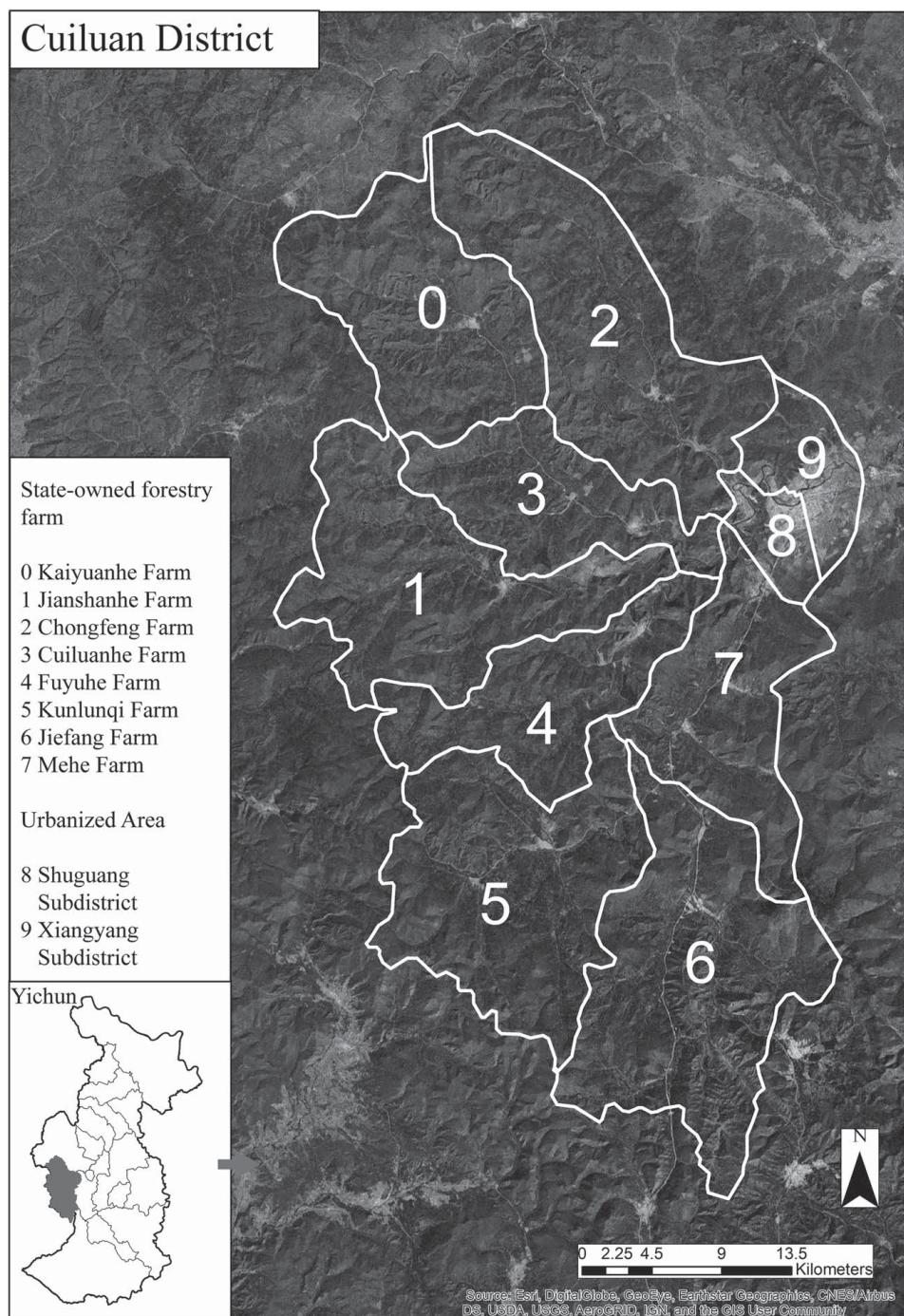


Fig. 2. Typical spatial pattern of forestry country-level jurisdictions in Yichun (Cuiluan District). A small urbanized area housing forestry-related residents is surrounded by lightly populated *farms* that were once sites for logging. (Map data from ESRI, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus, DS, USDA, AeroGRID, IGN, and the GIS User Community.)

partnership between at least three tiers of government, literally *central-provincial-local*, reflecting their hierarchy. However, we found this partnership to be unstable due to its complexity, as well as unequal relationships between power and responsibility among the three tiers of government responsible for Yichun redevelopment.

Yichun municipal government suffers from fiscal hardship, and thus, funding for redevelopment is a central aim of the three-tier partnership. After the 2008 recession, the State Council decentralized the goal of affordable housing construction to multiple state ministries (e.g., Ministry of Housing and Urban-Rural Development, see Table 1 for details). Each of these ministries also further

decentralized redevelopment responsibilities to lower-level governments (provincial and municipal government). The central government (State Council and state ministries) retained financial allocation and political pressure as a tool for mandating lower levels of government to implement policies such as forestry shantytown redevelopment (Cao et al. 2010). Allocation of financial resources is tied by the central government to quantified amounts of affordable housing construction, while political pressure is exerted by intergovernment agreements.

In Heilongjiang, the provincial-level Forest Industry Bureau requires every prefectural-level forestry bureau to sign an annual

redevelopment agreement clearly stipulating the lowest number of shanties that each prefectural-level forestry administration bureau should redevelop during that fiscal year (a sample agreement is found in [YSRO 2010](#)). To exert political pressure, the agreement also contains clauses that reward or punish local government officials depending on their execution of the policies. At the prefectural-city level, redevelopment policy is further decentralized. In 2008, the Yichun prefectural government established a Yichun Shantytown Redevelopment Office (YSRO) under the supervision of Yichun's Bureau of Housing and Urban-Rural Development to both further decentralize redevelopment policy to county-level government and to coordinate all shantytown redevelopment projects within Yichun. At the beginning of each fiscal year, YSRO's staff convene county government officials to discuss and allocate the number of shanties in the aforementioned agreement that each county-level jurisdiction should redevelop within the fiscal year. YSRO staff subsequently coordinate

efforts with county-level governments to implement the redevelopment (interviewee J).

Unfortunately, for the efficacy of redevelopment, the *central-provincial-local* government partnership is not stable. The central government is the initiator of political pressure for shantytown redevelopment. This pressure is strengthened by the provincial government and is carried down to the local government. Thus, instead of being a partner within a multilevel government collaboration, local government is at the bottom, the actor who must absorb all political and financial burdens, including shortfalls. The position of the provincial government, in the middle between the central government and local government, is vague (Table 2). Informants indicated that the provincial government downplayed its mediator role, thereby increasing hardships for the local government. Since 2013, a drastic recession in the industrial products market has further reduced economic growth in Heilongjiang and other Northeast provinces (Jilin and Liaoning), placing these provinces in a severe fiscal crisis. Consequently, Heilongjiang's provincial subsidy per square meter of resettlement housing declined from 200 RMB to 64 RMB in 2013, further dwindling to zero in 2014 and after. However, the cost of resettlement actually went up due to nationwide inflation. How was this added expense to be carried by the local government?

Under China's authoritarian regime, the major goal for a lower-level government is simply to implement higher-level government policy. In Yichun, the city government had little opportunity to express any feedback regarding the difficulty of policy implementation to either provincial or central government. This lack of feedback hindered policy revision and further reduced the alleged equality of the *central-provincial-local* government partnership. Like the Heilongjiang provincial government, Yichun's SOFB government has substantial economic problems since the prohibition of logging in 2013. This prohibition invalidated the city's primary economic function (resource extraction) and largely reduced the SOFB income, making the city unable to subsidize redevelopment. As a local official (interviewee M) stated, "... we hope that the central government or the provincial government can provide us with more funding, otherwise we really cannot withstand the financial burden of redevelopment ... we assume the suspension of provincial-level funding is because of economic hardship, it was not deliberately ceased"

Another local official (interviewee K) also stressed financial difficulties after the logging ban, "... before the logging ban, SOFBs could subsidize resettlement housing construction with their profits



Fig. 3. Retrofitted shanty in the Yilin SOFF, Wumahe District, Yichun. To the right, one may see an attached shanty. This was illegally built by the homeowners and was thus not subject to state-funded renovation. Homeowners used the attached shanty to raise cattle and planted vegetables in the garden. (Image by authors.)



Fig. 4. (a) A Halfway-demolished shanty in Youhao District's urban area of Yichun and (b) a low-quality resettlement housing with deteriorated façade in Cuiluan District of Yichun. (Images by authors.)

Table 2. Tiers of government and their obligations in the shantytown redevelopment

Government tiers (top-down)	Role and obligations
Central government	Initiator of political pressure and providing partial funding for local redevelopment (300 RMB per square meter)
Provincial government	Mediator between central and local government, providing partial funding for local redevelopment (200 RMB per square meter, suspended on 2013), setting up redevelopment quotas for local government to implement
Local government (prefectural- and county-level SOFBs)	Executor, in charge of everything else

from forestry industry, however, after the logging ban, SOFBs are having trouble with paying salary for their workers, let alone financially supporting shantytown redevelopment... we hope that central government can help us....” Unfortunately, given the limited feedback available in China’s governmental system, Yichun’s impoverished government may not have enough opportunities to express its concerns to the higher levels of government.

Social Resistance from the Grassroots: Resident Sentiments on Relocation

Similar to shantytown redevelopment projects elsewhere (Li et al. 2018), Yichun’s local government accelerate the redevelopment process that incurs grassroots’ resistance. This is largely due to the political competition mechanism that is introduced by higher levels of government to the policy implementation. Under stringent political pressure, Yichun’s SOFBs must innovate and compete in order to receive political promotions from higher levels of government. However, interviewees indicated that the competition between SOFBs leads to substantial conflicts and problems, particularly for affected families, who are effectively at the bottom of the governance ladder. To be rewarded by higher levels of government, SOFBs must relocate a certain number of families. Interviewees disclosed that it is common for SOFBs to evict holdout families in shantytowns to accelerate the redevelopment process and achieve higher numbers of relocated families.

Additional problems in Yichun ironically stemmed from oversights in the redevelopment legislation. For example, there is no clause in this legislation mentioning relocation compensation, which includes moving expenses and temporary accommodation expenses for families whose resettlement housing has not yet been accomplished. Although local officials acknowledged this deficiency of redevelopment policy, under the current dysfunctional *central–provincial–local* government partnership, there is little way to provide feedback on this issue, leaving resettled families to bear the negative results. Other problems stemmed from policies whose provisions were not entirely public. To accelerate the resettlement process, for example, the Youhao SOFB generated a *first-evacuate, first-choose* rule. This meant that families who evacuated first could have priority to choose the location, floor, and layout of their new resettlement housing. Additional rules addressed the needs of specific families with seniors and infants. In theory, these rules prescribed a seemingly fair process, but the political pressure for rapid resettlement meant that these rules ultimately were not strictly followed. As a local official (interviewee M) stated, “... at first we prioritized seniors; however, as the number of resettled families increased, we changed the process into a lottery....” These shifting principles were not always widely publicized to residents. Ultimately, rapid policy shifts in (re)housing allocation created a *black box* process, disadvantaging ill-informed families.

Shantytown redevelopment has succeeded in resettling large numbers of former shantytown families in Yichun. According to Yichun’s Housing and Urban–Rural Development Bureau (2015), Yichun has built 226,000 resettlement housing units between 2011 and 2015, housing around 450,000 residents. Many interviewees, however,

commented on the poor quality and congested layout of newly constructed resettlement housing. The floor area of most resettlement housing is about 50 m², both because the national State Forestry Administration (SFA) stipulated size as the limit that government subsidy would support and because resettled families were typically too poor to pay for any additional floor area. The resulting layout of resettlement housing is extremely congested, a problem made even worse by the lack of outdoor space that the demolished shanties once provided, for gardens, washing, livestock, etc. The limited funding previously discussed and the top-down pressure for local government to construct housing led, perhaps unsurprisingly, to low-quality construction that is holding up poorly in Heilongjiang’s harsh winter climate [Fig. 4(b)]. For example, exterior cladding has already spalled from resettlement housing only 6 years old in Youhao District’s resettlement area. This structural deterioration does not bode well for the future of this housing in the decades to come.

In contrast to shrinking cities in Western countries that have suffered long-term disinvestment, Yichun has avoided this. To address its decline, it has received investment from multiple tiers of government as well as subsidy from local residents, obliged to pay in part for their relocation. Of the 1,200 RMB per square meter cost of resettlement housing in 2010 (in China, this is the equivalent purchasing power of 600 cans of Coca-Cola in a retail store), the central government and provincial government reimbursed 300 and 200 RMB, respectively (SFA 2010), leaving local government and involved families to bear the rest of the expense. However, the RMB amount that the local government and resettled families must contribute is not stated by the policy. Consequently, Yichun’s SOFB determined the value of resettlement housing and the subsidy amounts provided for participating families following a one-to-one standard, meaning that resettled families will only receive subsidies for a floor area that is the same size (and no more than 50 m²) as their former shanties. Families desiring a larger dwelling must bear this cost themselves according to a price per square meter set by the Yichun SOFB (Table 3, the price of payment). This price also varies according to the floor because resettlement housing is not equipped with elevators; thus *the lower the floor, the higher the price*. Following the principle of further decentralization, the value of resettlement housing and subsidy amount varies among Yichun’s county-level jurisdictions (Table 3). In addition, before moving into the resettled housings, families have to absorb the additional cost of furnishing because, in most cases, Chinese contractors complete building construction without providing interior furnishing.

While resettled families also have invested a lot in their new housings, many of them still vote with their feet by leaving the housing behind due to lacking new job opportunities. YSRO has designated resettlement housing as *Economic and Comfortable Housing* that cannot be sold on the market for 5 years after construction, yet numerous property selling advertisements are visible in the windows of resettlement housing, seeming to confirm the high vacancy rates of resettled housing indicated in resident interviews. These newly built resettlement housings have high vacancy rates, as many resettled families subsequently moved elsewhere to seek better economic opportunities. Some resettled interviewees claimed that the vacancy rate of resettlement housing was as high

Table 3. Compensation criteria of resettlement housing in two districts of Yichun in 2016

Floor	Youhao district (RMB per square meter)			Cuiluan district (RMB per square meter)		
	Price	Total subsidy	Payment	Price	Total subsidy	Payment
First floor	2,400	1,300	1,100	1,500	1,000	500
Second floor	1,300	1,300	0	1,000	1,000	0
Third floor	1,400	1,300	100	1,000	1,000	0
Fourth floor	1,400	1,300	100	1,000	1,000	0
Fifth floor	1,200	1,300	−100	1,000	1,000	0
Sixth floor	990	1,300	−310	800	1,000	−200

Source: Data from County-Level Housing and Urban–Rural Development Bureau (Cuiluan District), personal communication, 2016.

as 80%–90% in some areas and that most of the remaining residents were either retired or unemployed. As one unemployed resident (interviewee Q) said “... every residential building is highly vacant, people moved elsewhere to make a living, there are so few job opportunities here and the younger generation cannot survive by staying here ...”

Nostalgia for the old neighborhood was a characteristic of urban renewal, and the same is true in Yichun. A major disincentive for residents to move to resettlement housing may be that the amenities of space and flexibility provided by resettlement housing are reduced, yet the cost of living of resettlement housing is higher. Some resettled interviewees stated boldly that they would have preferred that their former shanties [Fig. 4(a)] had been refurbished, as shanties on forestry farms had been (Fig. 3). Remaining in a rehabilitated dwelling would have made the change in their quality of life been less drastic and costly. As a shanty-living resident stated (interviewee W), “... we have no choice but to obey the government’s rules, if the government had not evicted us, we’d prefer to live in shanties, where we have gardens for planting vegetables, and where burning coal for heating is much cheaper than the central-heating fee ... we sincerely do not want to be relocated ...”

With very limited cash flow after the logging ban, many former forestry workers cannot afford their daily expenses after being resettled. A resettled and unemployed residents (interviewee S) complained that “... we saved money for decades, but our savings were all contributed to the [cost of the] resettlement houses, some even have mortgages ... everyone wants to have quality of life, but they (holdout families, who refuse to move) do not have money and cannot afford living in resettlement housing ...” Upon hearing such complaints, a government official (interviewee M) noted that “... these complainers are exceptional, they should blame no one but themselves for being poor ...” This attitude, while reflecting the opinion of only one official, indicates that resettlement, rather than palliating the difficulty of life in Yichun after the collapse of forestry, may have exacerbated potential conflict between residents and the local government, although the latter of which also invested a lot in the redevelopment.

Even as many resettled families are dissatisfied with their new abode, there remain large numbers of families (30,000–40,000 households in Yichun according to our interview with one YSRO official, interviewee K) who continue to live in unrehabilitated shantytowns. These families can be categorized into three types.

- (1) Families who have refused to move as they are dissatisfied with the terms of resettlement housing (quality and price). This group may be thought of as *holdout families*.
- (2) Families who cannot afford the relocation expenses and higher cost of living in resettlement housing. This group of the very poor may be thought of as *underclass families*.
- (3) Families who are living in shantytowns, typically difficult to access, that SOFB has yet not proposed to redevelop. These may be thought of as *remote families*.

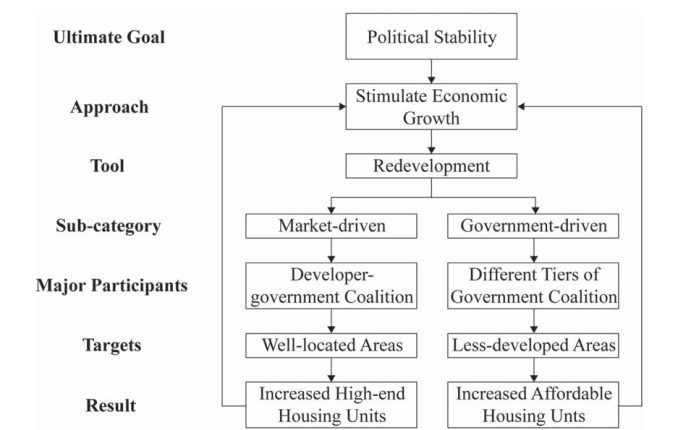


Fig. 5. A comparison between market-driven and government-driven redevelopment in China.

In some cases, these types may be mingled. For example, we encountered families that were both Type 1 and Type 2 in Wumahe District. When being asked why some local residents (interviewee W) were still living in a large shanty area very close to downtown Yichun, the resident stated, “... because it is a well-known underclass area, government officials know we cannot afford the cost of relocation ... we want to save money for our kids and ourselves ...”

While remote families suffer from poor housing quality, holdout and underclass families suffer not only from poor housing quality but also from additional problems stemming from incomplete redevelopment. As many neighboring houses have been demolished, the structural safety of holdout and underclass families’ houses is often at risk. Our interviews of holdout and underclass residents indicated that partially vacant and half-demolished structures have additional problems like illegal trash dumping, poor hygiene, and personal safety threats. Quality of life is also reduced because community services like grocery stores and primary schools have been evacuated from redevelopment areas. The problems currently afflicting Yichun SOFBs, which will be detailed in the next section, mean that holdout and underclass families may be confined to their half-empty neighborhoods for the foreseeable future in a manner similar to residents remaining in half-empty neighborhoods in shrinking American cities (Frazier et al. 2013; Kuhlmann 2020).

Overdraft of Local Credibility and Capability

The local SOFBs have not benefitted from urban shantytown redevelopment either. While the redeveloped, *modernized* urban landscape of Yichun might be claimed as a political achievement, the expenses of this redevelopment have further exacerbated SOFBs’ economic hardships. Despite a large sum of public capital being

invested into redevelopment, Yichun's economic downturn and depopulation have not yet been stopped, even as the credit of the SOFB has been nearly exhausted. Due to the constant growth of China's consumer price index (CPI), both labor costs and the price of building materials have been increasing. One local official at YSRO (interviewee J) stated, "... the building cost is constantly increasing, especially the building material and labor cost, while the provincial-level funding has been reduced" This makes redevelopment of shantytowns more expensive even as the funding available for such redevelopment is reduced. However, under stringent political pressure, every SOFB has to keep carrying on with redevelopment, even with reduced finances. This challenge has been exacerbated by the drop in SOFBs' provincial and forestry income. Therefore, most SOFBs require bank loans to finance redevelopment activities and mandate their contractors to commence work prior to payment. Understandably, with reduced transfers from higher levels of government and with substantially reduced income, SOFBs are falling into debt both to banks and contractors. Interviewees (interviewee J) indicated that some SOFBs were so indebted as to be approaching bankruptcy, making it nearly impossible for these SOFBs to raise additional financing for shantytown redevelopment. Interviewee J stated, "... shantytown redevelopment is now in a great hardship, many SOFBs owe a large sum of money to contractors ... we really hope the central and provincial government can appropriate more funding"

The city's decision to have engaged in redevelopment may have had an opportunity cost of pursuing alternate, perhaps less expensive, strategies to improve local residents' lives and economic development. Yichun actually has many assets, even in the absence of policy incentives. The city's organic agriculture and senior care industry are developing quickly in recent years due to the city's high latitude and location away from (most) industrial plants. However, local officials, overwhelmed by implementing redevelopment, have been unable to promote such alternative economic development in Yichun, according to informants. In addition, resettled residents are financially impoverished, may not have job opportunities locally, and therefore have to move elsewhere to be employed. Had they not been indebted by resettlement, these residents might have been able to construct new businesses, allowing them to remain in Yichun. Furthermore, the aim of complete redevelopment to which the national government has committed local municipalities is highly unlikely to be met, given that Yichun is deprived of economic means and that provincial subsidies have now vanished. Thus, Yichun is faced with a mandate that is both difficult to realize and demonstrably problematic in its realized effects. This would be a severe dilemma for even the most sophisticated policymaker; one might justly ask how this dilemma can be resolved by Yichun officials.

Yichun's incomplete, problematic shantytown redevelopment can be seen as an analogue of China's larger affordable housing policy challenges (Wang 2001; Naughton 2009; Wang and Murie 2011), in which growth-oriented economic policy trumps social justice and the real needs of low-income residents. While Yichun's aim is not to stimulate its economy but simply to rehouse residents, city's underclass families, plus its holdouts and remote families, are excluded from redevelopment decision-making, and many resettlement benefits, just as such residents, have been excluded from redevelopment in China at a larger scale.

Discussion and Conclusion

Although China's transition economy is still in the process of reform toward the market, Yichun's shantytown redevelopment process reflects a planned economy process more than a market

economy. In the space of a few years, Yichun's shantytown landscape was rebuilt, with low-quality shanties replaced by modernized residential multistory buildings. These new structures served as physical propaganda for the ongoing state-driven economy of socialist China. Yichun's rehousing movement mirrored, to some extent, the rebuilding or prosperous post-Soviet cities in eastern Germany, where the clearance of prefabricated multifamily housings was also clear-cut of socialist memory (Gribat 2010). However, whereas Germany's rebuilding was in part driven by community outreach, Yichun's version of rebuilding reflected mostly the wishes of politicians. More so than Germany's post-unification rebuilding, which was comparatively moderate, the unprecedented scale of shantytown redevelopment in Yichun recalls the postwar urban renewal of the United States. The mixed legacy of urban renewal spurs reflection on the potential legacy of Yichun's transformation.

Both postwar urban renewal in the US and Yichun's shantytown redevelopment had the goal of stimulating economic growth. The US federal government intended urban renewal to boost its postwar economy and provided long-term mortgages and a large sum of public funding to that effect (Downs 1985). For China's central government, shantytown redevelopment in Yichun and elsewhere was a policy with multiple benefits. Not only did redevelopment provide visual propaganda demonstrating government capability, but also the construction work offset the 2008 economic recession. That also being said, state-led shantytown redevelopment in China is one of many socialist remedies for weak market and political instability, playing a similar socioeconomic role as market-driven redevelopment (Fig. 5). Yet, this positive visibility and job creation came at a price as poor families who could only afford their shanties were forcefully evicted and drained of savings, all in the interest of serving the regime's desire to promote its image and to stimulate economic growth.

Both policymakers in the United States and China wished to counteract the persistent depopulation of urban areas by rebuilding them. Urban renewal coincided with white flight and suburbanization, and redevelopment aimed to create more residences to house this shrinking population base (Zhang and Fang 2004). Officials in Yichun and higher-level Chinese governments are also reluctant to accept the reality of urban shrinkage, deeming population loss a stigma. After learning that an author of this study was visiting Yichun as part of a survey of shrinking cities, a high-level Yichun government official (interviewee I) replied very unhappily, "... sorry, but I have to tell you that you arrived in the wrong place. Yichun is not a shrinking city, and the population of Yichun will go back to a growth track very soon ...". Ironically, another informant claimed that this very official was planning to move to a larger city after retirement to live with their only child, who had left Yichun earlier.

However, not everyone in Yichun has the resources to leave, as this government official may have been planning to do. Many Yichun residents are trapped in the new, low-quality dwellings, their *last resort* after being displaced from their shanties. US postwar urban renewal also demonstrated that the living cost of involved families drastically increased after resettlement, and that only those who already had adequate financial and personal resources could benefit from relocation (Hartman 1964). Shantytown redevelopment in Yichun seems to be an artificial selection process, accelerating out-migration of the middle-class people while leaving the poorest in a form of lockdown in their new rehousing, burdened with costly mortgages to repay.

How might shrinking cities elsewhere learn from Yichun's example of redevelopment? Yichun's ambitious redevelopment provides a cautionary tale. While some planning scholars have promoted terms like *smart shrinkage* and *right-sizing* to encourage city officials to accept the reality of shrinkage (Schilling and Logan 2008; Heim LaFrombois et al. 2019), the shrinking city remains stigmatized not just in the Western world (Beauregard 2003; Wiechmann and

Pallagst 2012; Ryan and Gao 2019) but in China as well. The remedy, however, is different. Where the US *growth machine* is an alliance of local companies and government officials (Molotch 1967, 1976), China's growth machine is a game in which local governments seek to conform well enough to higher-level mandates in order to be promoted. Shantytown redevelopment policy was quite explicit about this reality of government hierarchy in China, providing inter-government agreements that clearly incentivized local officials to compete in their desire to conform to government policies. That local government officials may have prioritized their personal gains rather than the public interest in this race to redevelop and gain favor should not be a surprise, a similar story noted by Edin (2003).

If any consensus on planning in shrinking cities is to be found (Bernt 2016), a central tenet must be the principle that planning for the people who live in these places, who are often poor and with limited resources, must be the principal aim of public policy. Rather than seeking to attract new migrants to these places, caring for those already there needs to be a central goal of urban planning (Gao and Ryan 2020). Yichun's redevelopment process, which manifests in both the *Revive the Northeast* policy and the shantytown relocation explained in this study, shows a lamentable lack of concern for social justice.

Adopting a paradigm of *planning for people* that might require substantial reform of China's authoritarian state in favor of the establishment of a stronger civil society might seem impractical. Nevertheless, the authors propose some gradual modifications of current paradigms in the hope that such policy remedies might serve as a pathway to incremental achievement of the aforementioned.

- (1) Given the top-down governance structure of China, policy revision at the central government level is likely to be more effective than at any other tier of public agencies. As NFCP has reduced forestry-related job opportunities that cannot easily be replaced in existing forestry cities like Yichun, the central government might provide additional ecological compensation strategies and raise compensation standards for worst-affected people like holdout families in Yichun.
- (2) The current government partnership of *central-provincial-local* is unidirectional; information only goes top-down, without any feedback from lower levels of government. The one-way governance system currently rewards only conformance with top-down mandates, clearly shown in the problematic shantytown redevelopment. One possible solution is to establish an anonymous whistleblower system at the central government level, allowing local officials and perhaps even shanty dwellers to submit complaints, to enhance the bilateral exchange of information between policymakers and local policy executors and affected residents possible. This is a pressing need in China today, not only in shantytown redevelopment but also in policymaking in general.
- (3) Reforming SOFBs and other similar state-owned enterprises is one of the major remaining challenges for China's *socialist market economy*. Because of their integration of government and enterprise, SOFBs are not only affected by ecological measures like the logging ban but with the high cost of public services like shantytown redevelopment. One measure that might alleviate this burden would be to relieve SOFBs of their local government function, permitting these industries to innovate beyond forestry in the manner of other market economy corporations.
- (4) Yichun urban planners did not accommodate and gather resident input in order to mesh this input with public policy action, rather act only to draw community blueprints for local officials. Yichun and elsewhere in China possess planning committees and public hearings to review planning documents, but the committee members are not fully accountable to the public, while

final decision-makers usually disregard dissenting opinions (author's participatory observation). Changing this planning function might require evolution of or even a shift in planning legislation in order to further empower the participatory right of the public as well as planners' role in expressing this public opinion to decision-makers.

- (5) For those families remaining in unrehabilitated urban shanties, whether by choice (holdout families) or not (underclass families), such families should receive an alternative form of compensation than other resettled families, rather than simply being deprived of redevelopment benefits. This means that the public sector might devise alternative methods of shantytown redevelopment, including possible restoration and even rebuilding of parts of the dilapidated urban shantytown communities. Rehabilitation of shanties, as on the state-owned forestry farms, has already proven possible.

Our recommendations may be considered preliminary. Eliminating the social and economic woes of shantytown families and enhancing the effectiveness and responsibility of local government will be challenging, and additional research and practice will be required by practitioners, scholars, and politicians in the future in order to provide answers to these dilemmas. As Mallach (2011) noted, a "shrinking city is a symptom, not a disease." Future strategies toward China's urban shrinkage might focus more on aspects of social, economic, and political policies, much as occurred in US cities after urban renewal collapsed in the 1970s.

While declining cities in the Western world desperately seek reinvestment under neoliberalism (Berglund 2020), the experience of Yichun shows that reinvestment may not always be a boon for shrinking cities. With its powerful state investment providing outcomes that are problematic at best, Yichun provides a counterexample that scholars who advocate stronger intervention may be surprised to see (Hackworth 2014; Dewar 2015). The problematic legacy of the American postwar urban renewal program and the difficulties of Chinese state-led shantytown redevelopment in Yichun might be interpreted as indicating that overintervention by public sector agencies is not the path for a successful outcome in the shrinking city. The partial success of Germany's *Stadtumbau Ost* demonstrates, on the other hand, that government-driven redevelopment is not a chimera that is doomed to be a failure in shrinking cities. Learning from Germany, where strong government intervention both accommodates and benefits from local initiative and citizen participation, is a goal for shrinking cities in China and elsewhere.

Decades ago, the dormitory terrace housing built by state-owned forestry enterprises in Yichun and other forestry cities in Northeast China was modest but decent housing for migrants coming to work in this growing area of China. Today, the same dwellings, deteriorated over the decades, are defined as shanties, deserving only of total clearance. Will Yichun's newly built resettlement housing become the shanties of the future, only to be demolished in their turn? This vicious cycle need not come to pass if the aforementioned five policy modifications can be implemented in Yichun and other cities like this, and it is the sincere hope of the authors that decision-makers may learn from this study and embark on the path to instituting such progressive policies.

Appendix: List of interviewees

The following interviews were mostly conducted during summer 2016, while others were conducted earlier in October 2015 as a pilot field survey. Not all of the following interviews directly contributed to this paper, but these assisted the authors in having a more solid understanding of Yichun's shantytown redevelopment.

Group A: Government officials in Yichun

- (A) A staff member of Secretary Division of Yichun Vice Mayor, conducted on October 12, 2015;
- (B) A staff member of Yichun Urban and Rural Planning Bureau, conducted multiple times in October 2015 and 2016 summer;
- (C) A staff member of Local Chronicle Bureau of Yichun, conducted on October 15 2015;
- (D) A staff member of Wumanhe District's Propaganda Department, conducted on October 16, 2015;
- (E) A staff member of Yilin Farm, Wumahe District, conducted on October 16, 2015;
- (F) A staff member of Yichun Urban and Rural Planning Bureau, conducted multiple times in 2016 summer;
- (G) A staff member of Yichun Urban and Rural Planning Bureau, conducted multiple times in 2016 summer;
- (H) A staff member of Yichun Land Resource Bureau, conducted on August 6, 2016;
- (I) A staff member of Yichun Urban and Rural Planning Bureau, conducted on August 9, 2016;
- (J) A staff member of Yichun Housing and Urban-Rural Development Bureau, Yichun Shantytown Redevelopment Office, conducted on August 9, 2016;
- (K) A staff member of Yichun Housing and Urban-Rural Development Bureau, Yichun Shantytown Redevelopment Office, conducted on August 9, 2016;
- (L) A staff member of Yichun Municipal Bureau of Civil affairs, conducted on August 11, 2016;
- (M) A staff member of Youhao District's Housing and Urban-Rural Development Bureau, conducted on August 12, 2016;
- (N) A planner from Yichun's Urban Planning and Architectural Design Institute, conducted on August 17, 2016;
- (O) Several staff members of Yilin Farm, Wumahe District, conducted on August 25, 2016.

Group B: Local residents in Yichun

- (P) Several local residents in Yilin Farm, Wumahe District (whose houses were retrofitted), Conducted on October 16, 2015;
- (Q) Several local residents in Cuiluan District (just after being relocated to multifamily housing), conducted on August 7, 2016;
- (R) Several local residents in Youhao District (who were still living in shanties), conducted on August 12, 2016;
- (S) Several local residents in Youhao District (who were just being relocated to multifamily housing), conducted on August 12, 2016;
- (T) Several local residents in Xilin District, conducted on August 21, 2016;
- (U) Several local residents in Yilin Farm, conducted on August 25, 2016;
- (V) Several local residents in Cuiluan District (who were working in Cuiluan Industrial Park), conducted on August 27, 2016;
- (W) Several local residents in Wumahe District (who were living in shanties), conducted on August 27, 2016.

Data Availability Statement

Some or all data, models, or codes generated or used during the study are available from the corresponding author by request: interview transcript and voice record.

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