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Case-Based Analysis of Drivers and Challenges for Implementing Government-Led Urban Village Redevelopment Projects in China: Evidence from Zhejiang Province

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Published in:
Journal of Urban Planning and Development

DOI:
[10.1061/\(ASCE\)UP.1943-5444.0000594](https://doi.org/10.1061/(ASCE)UP.1943-5444.0000594)

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Recommended citation(APA):
Yuan, D., Bao, H., Yau, Y., & Skitmore, M. (2020). Case-Based Analysis of Drivers and Challenges for Implementing Government-Led Urban Village Redevelopment Projects in China: Evidence from Zhejiang Province. *Journal of Urban Planning and Development*, 146(3), Article 05020014.
[https://doi.org/10.1061/\(ASCE\)UP.1943-5444.0000594](https://doi.org/10.1061/(ASCE)UP.1943-5444.0000594)

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22 alteration, the lock-in effects or policy continuity preferred by the government echo the
23 institutional equilibrium put forward by North.

24 **Keywords:** urban village; urban renewal; property rights; urbanization; institutional
25 arrangement; transaction costs

26 **Introduction**

27 An urban village, also known as a ‘village-in-the-city’ or *chengzhongcun* in Chinese, is a
28 unique spatial environment that has emerged in China since the mid-1980s during the country’s
29 rapid urbanization ‘enclosure’ movement (Lai et al. 2016; Wu & Wang 2016). The rapid
30 urbanization is an interactive process between urban and rural development (Tang, Zhao, & Gu
31 2017), during which the emergence of urban villages is also a product of the urban-rural dual
32 system (Buckingham and Chan 2018). With the high demand for urban land, farmlands located
33 near cities were usually expropriated first due to the relatively low compensation and
34 transaction costs involved (Hao et al. 2011). Rural building plots (*zhaijidi*) for settlement and
35 commercial land (*ziliu jingji yongdi*) reserved for commercial development purposes were left
36 to the villagers (Lin et al. 2014). Consequently, the remaining land and buildings in villages are
37 geographically surrounded by modern skyscrapers. Under the urban-rural land system, the
38 informality of urban villages has consequently emerged (Wu et al. 2013). In view of the
39 excessive reduction in arable land due to extensive farmland expropriation in previous years,
40 the Chinese central government set 1.8 billion *mu* (or 1.2 billion hectares) as the bottom line for
41 preservation of farmlands. China’s urbanization has thus entered a new era in which land
42 redevelopments target at building plots in urban villages (Guo, Xiao, & Yuan 2017). The local
43 governments, especially in eastern coastal regions, have begun to expropriate rural building
44 plots in urban villages through urban village redevelopment projects (UVRPs) to meet the
45 surging need for new development land. In these projects, local governments assembled sub-

46 optimally used rural land in urban villages and then subdivide the consolidated land into land
47 parcels for different uses. Some parcels of land are sold to offset the costs of redevelopment
48 projects while the remaining plots are employed to relocate the affected villagers (Yau 2009;
49 Yuan, Yau, & Li 2017). Through such a process, Chinese megacities have been characterized
50 by top-down planning and large-scale urban development and redevelopment (Chen & Qu
51 2020).

52 President Xi Jinping has vigorously promoted the China Dream, meaning “a great rejuvenation
53 of the Chinese nation”, in his various public speeches since 2012 when he first invoked the term
54 at China’s National Museum of History (Xinhua 2012). UVRPs have played a substantial role
55 in economic growth and modernization; therefore, UVRPs, being one component of China’s
56 urbanization, are also very relevant, if not critical, to the achievement of the China Dream
57 (Taylor 2015). However, in the transitional phase to modernization, they breed not only
58 stability but also instability (Huntington, 2006). Because of land deprivation and infringement
59 of economic interests, a large number of violent conflicts and social disputes are resulted in the
60 process of physical and landscape transformation through UVRPs (Wu and Zhou 2005). Land
61 requisition, for example, produces an increasing number of land-lost farmers who, despite some
62 turning to self-employment in economically advanced regions, are often incapable of
63 integrating themselves into urban life and are confronted with a wide range of potential risks
64 (Bao et al. 2016; Yuan et al. 2017). Nail households (*dingzihu*), that is the last householders
65 who refuse to give up their property rights, have emerged. Sometimes, they have been relocated
66 involuntarily or even forcibly, ultimately triggering tensions or even fatal incidents between
67 governments and villagers (Tang et al. 2008). Conflicts over land and informal settlements have
68 become a severe source of social instability (Barry et al. 2007). Some blame government
69 entrepreneurial behavior for failing to consider social implications during the process of urban
70 village redevelopment (Cheung and Leung 2008).

71 Therefore, the social consequences of UVRPs should not be ignored by academic researchers
72 and public administrators. In this light, this study addresses the following four questions: 1) Do
73 local governments still play a dominant role in UVRPs? 2) What are the driving factors
74 prompting the implementation of UVRPs? 3) What are the policies implemented for
75 encouraging villagers' participation? 4) What are the main challenges encountered during the
76 redevelopment process? These questions have been rarely explored comprehensively in the
77 existing literature. The answers to these questions are crucial for us to understand the practices
78 of urban village redevelopment in mainland China. The research is also particularly relevant to
79 the goals of China's new-type urbanization and people-oriented urbanization. This study
80 employs case studies and in-depth interviews in Zhejiang province. The theory of new
81 institutional economics is also embedded in the analysis process.

82 **Research design**

83 To answer the research questions, it is essential to select some Chinese cities that are
84 representative for data collection. Since large-scale UVRPs have been implemented in Zhejiang
85 province for years, we selected five cities – Wenzhou, Taizhou, Yiwu, Ningbo and Hangzhou in
86 Zhejiang province as the field sites to mitigate the temporal and geographical impacts. Zhejiang
87 province is located on the eastern coast of China, as shown in Fig. 1. The fieldwork and desk
88 study were conducted from 1 June 2017 to 1 November 2017. In total, 394 UVRPs were finally
89 studied. Among these projects, 87, 40, 52, 100, and 115 came from Taizhou, Ningbo, Yiwu,
90 Wenzhou, and Hangzhou, respectively. This study answers the first research question based on
91 these 394 UVRPs from the perspective of new institutional economics. Basic information of
92 these projects were collected from various sources such as government documents and websites.
93 Wenzhou city was then selected for a in-depth case study to answer the second question which
94 is about the driving factors to stimulate the local government to implement UVRPs. Wenzhou
95 was picked for the case study because it is a representative example of Chinese city

96 experiencing rapid urban transformation. In addition, most UVRPs in Wenzhou were
97 implemented after 2016.

98 [Fig. 1 about here: Geographic locations of the five cities]

99 To answer the third and fourth research questions, both primary and secondary data were
100 collected for the analysis. For the third research questions, primary data were collated from
101 semi-structured interviews with ordinary villagers, the village committees (VCs), and
102 government officials from various departments, including the city land resource bureau, city
103 construction committees, the district government, and the sub-district government (*jiedao*). Due
104 to the limitations of time and financial resources, it was impossible to visit every UVRP for
105 data collection. Therefore, to unpack how the policies were formulated and implemented
106 actually and what challenges were there during the redevelopment process, this study focused
107 on UVRPs implemented in two districts in Wenzhou city, namely Longwan district and Ouhai
108 district. In total, 26 urban villages in these two districts were visited. In each visited village, two
109 or three affected villagers were interviewed. A total of 36 interviews were recorded and
110 transcribed. The recorded primary data were mainly used as evidence to support our arguments.
111 For ordinary villagers and VCs, frequently asked questions include: What strategies did village
112 cadres or government officials adopt to persuade you to participate in the UVRP? What
113 strategies did you use to persuade affected villagers to participate in the UVRP? What
114 challenges did you face when implementing the UVRP? Were there holdout problems in your
115 village? If so, why? Why did you want to be a nail householder? Has there been any violent
116 conflict during the UVRP? If so, how did the conflict arise? Since urban village redevelopment
117 is a sensitive topic in mainland China, acronyms were used for the names of the villages
118 reported in this paper to protect the identities of the interviewees.

119 To further understand the barriers to the redevelopment, we needed to hear the voices from
120 government officials. Since it is impractic to access a large number of government officials in
121 the two districts in Wenzhou, we expended the interviews to cover government officials from
122 the other four cities in Zhejiang province to maintain the robustness of the research. In total, we
123 visited 63 government departments in five cities. Government officials were asked: What
124 principles did the local government use to determine whether a UVRP should be implemented
125 or not? What was the process of policy formulation? How was the policy finally determined?
126 What was the compensation and relocation policy to implement a UVRP? What were the main
127 objectives in implementing a UVRP? What were the funding sources to implement a UVRP?
128 As for the secondary data for answering the third and fourth research questions, official policy
129 and planning documents were retrieved from the government officials interviewed. Fig. 2
130 summarizes the design of this research.

131 [Fig. 2 about here: The roadmap for research design]

132 **Dominant role of the state in UVRPs**

133 Recently, large-scale UVRPs have been initiated by the governments at the district or city level.
134 The affected villagers' willingness to participate in the projects has become a very important
135 factor to determine the pace of the redevelopment process. Some projects are implemented very
136 smoothly while others face delays because of villagers' resistance. New institutional economists
137 often analyze social phenomena by exploring the relationship between the institutional
138 arrangements and the transaction costs involved. Institutions consist of formal rules and
139 informal rules. Formal rules include political (and judicial) rules such as constitutions,
140 regulations, laws, economic rules and contracts while informal rules comprise conventions,
141 moral rules and social rules (North 1990). China's urban growth demonstrates neoliberal
142 urbanism. One of its key characteristics is the existence of diverse administrative or

143 bureaucratic forms with different levels of transaction costs incurred (Li et al. 2014; Yuan et al.
144 2019). The disparity of policies regarding urban village redevelopment across different
145 localities reflects the heterogeneity and flexibility of institutional arrangements. Institutional
146 settings are designed to influence actors' decisions and to structure the roles of the actors
147 involved in the process of UVRPs. In this study, we define the institutional arrangement of
148 UVRP from the perspective of decision making. A 'top-down institutional arrangement' refers
149 to an UVRP led by local authorities that have the power to decide relevant policies. On the
150 other hand, a 'bottom-up institutional arrangement' refers to an UVRP led by village
151 committees (VCs) that have been empowered to decide the relevant policies, demonstrating true
152 community participation. The main difference between the top-down and the bottom-up
153 approaches lies in who holds the actual power over the formal rule formulation (e.g.
154 compensation and relocation policies) for the UVRP implementation.

155 With reference to the 394 UVRPs in Zhejiang province under investigation, the mean value of
156 the projects' initiating years is 2014 (SD = 4). This indicates that most UVRPs were initiated in
157 the period between 2010 and 2018. Based on the institutional arrangement dichotomy
158 aforementioned, we found that 360 UVRPs (91.4 percent) were implemented with a top-down
159 institutional arrangement and 34 (8.6 percent) with a bottom-up one. Fig. 3 clearly shows that
160 the majority of UVRPs in Zhejiang province are government-led. These findings offer some
161 insights for the answer to the first research question – governments are playing a dominant role
162 in the implementation of UVRPs. In the top-down institutional setting, the governments bears
163 the costs of policy formulation, policy persuasion, negotiation, contracting, contract
164 enforcement, and monitoring. The bottom-up institutional arrangement has only been
165 implemented in a few experimental cities like Yiwu city. Since UVRPs in contemporary China
166 are predominated by the government-led arrangement, the remaining part of this study will
167 focus on government-led UVRPs only. In the next section, the factors that drive the

168 governments to implement government-led UVRPs is analyzed using the official policy and
169 planning documents relevant to the UVRPs in Wenzhou city.

170 [Fig. 3 about here: Institutional arrangements of the UVRPs in the five cities]

171 **Driving factors to implement government-led UVRPs: An example of Wenzhou city**

172 *Background of Wenzhou city*

173 Wenzhou is located in the mountainous southeastern corner of the coastal Zhejiang province
174 and is an important contemporary harbor and commercial city in China. The previous rapid
175 economic development in Wenzhou can be attributed to privatization, marketization, and local
176 deviation from state policies (Liu 1992). However, Wenzhou's growth in recent years has faced
177 a series of challenges. Local development has slowed down, and there have been calls for the
178 'scaling up' of regional development (Wei et al. 2007). The quality of the ecosystems and the
179 living environment is also decreasing. For example, Sanyang Wetland in Ou Hai district has
180 largely deteriorated, and an estimated 89.5 percent of its value—derived from wetland functions
181 (e.g., food production and biodiversity support), recreational and educational opportunities,
182 aesthetics, spiritual enrichment, and market-based goods and services (Daily 2007)—needs to
183 be restored to reach its potential value (Tong et al. 2007). The local water system (the Aojiang
184 River watershed) has been heavily polluted by the leather industry (Li et al. 2010), and the
185 living environment of urban villages is also worsening. The quality of self-built housing is also
186 diminishing due to physical depreciation of the houses (most were constructed in the
187 1980s/1990s) and the destructive impact of typhoons; the public facilities around urban villages
188 are deteriorating. There are ubiquitous illegal buildings due to family-based economic
189 development under the acquiescent attitude of the government toward the semi-legal or illegal
190 practices involved. The current transportation system is still underdeveloped. Moreover, the
191 increasing population pouring into Wenzhou is leading to increased demand for urban land use

192 and public facilities. Thus, there is a potential institutional lock-in situation in Wenzhou city (Ye
193 & Wei 2005).

194 In response, the Chinese central government has issued a series of new planning schemes
195 setting out requirements to transform Wenzhou into an important city that aims to connect the
196 Yangtze River Delta and the Western Taiwan Straits Economic Zone. In addition, a pilot
197 financial reform scheme will be initiated in the near future. These kinds of national strategies
198 provide great opportunities as well as challenges to optimize a variety of resources to improve
199 Wenzhou's current situation. Hence, Wenzhou's development model needs to be amended to
200 cope with these emerging problems.

201 Land provides the foundation for development – it yields production and promotes economic
202 development (Liu et al. 2018). UVRPs are also an important method for readjusting land use
203 functions to utilize land resources more intensively. Prior to 2016, UVRPs were not
204 implemented smoothly in Wenzhou. However, on 10 October 2016, four self-built houses
205 collapsed suddenly in ZYT village caused by the poor housing condition, resulting in the deaths
206 of 22 individuals (Baidu Baike 2016). If the government had redeveloped ZYT village earlier,
207 the collapse could have been avoided. Such accidents have reinforced local governments'
208 determination to speed up the process of UVRPs to avoid any possible recurrence of similar
209 accidents. Why the Wenzhou government was determined to accomplish over 80 UVRPs in the
210 main urban area (*zhuchengqu*) is discussed below.

211 ***Driving factors for implementing UVRPs***

212 It has been argued that the rationale for the local governments to initiate UVRPs is to gain
213 massive land transfer fees (Cao et al. 2014). This could be a result of the rise of entrepreneurial
214 local governments who strive to maximize land revenue (Hubbard 1995). However, merely
215 maximizing land revenues without proper urban planning can easily lead to the evolution of

216 ghost cities in which local residential demand and economic growth cannot substantiate rapid
217 urban development (Jin et al. 2017). Therefore, local governments begin to enhance the city's
218 comprehensive competitiveness to attract more high-end immigrants into the cities through
219 shifting from the previous land-based mode of urbanization to a people-based one. This study
220 argues that the initiation of UVRPs is very relevant to governments' urban planning at the city
221 and district levels to reinforce cities' attractiveness and competitiveness to face continued
222 interurban competition. More specifically, UVRP implementation in a city is driven by the
223 governmental need to increase the city's competitive capacity, which practically demonstrated
224 in the following four aspects: sustainable economic development, public facilities construction,
225 environmental restoration, and city image enhancement.

226 As for economic development, the Wenzhou government intends to cope with declining
227 economic development in recent years by building the Technological Town of South Zhejiang
228 (*Zhenan kejicheng*), comprising a building area of 28 kilometers, to upgrade the traditional
229 industry. According to the official online plan, the intended industry construction needs to
230 expropriate the land and housing of 16 urban villages under the jurisdiction of three sub-district
231 governments. A sub-district is the local government unit in the urban area, according to the
232 Chinese administration system (Xu et al. 2018). The self-built housing in the affected urban
233 villages needs to be expropriated and demolished first, the transferred land then being used for
234 industrial purposes. The plan is for one parcel of land to be reserved for the construction of a
235 high-rise building to relocate the affected villagers. Construction of adjacent public facilities
236 such as the railway S1 line, parks, highways, and subways is also planned to improve public
237 accessibility. The transformed high-technology industry is expected to create spillover effects
238 that will stimulate local economic development and urban growth in the long term. Investors
239 and workers can produce social product. As Buckley (2008, 19) states, "urbanization is

240 inextricably linked to industrialization and modernization, both historically and among rapidly
241 growing developing countries today”. In the 1990s and early 2000s, for example, there was a
242 boom in development zones or industrial parks planned by the local government to attract
243 external investors with a low rental price (Deng and Huang 2004; He 2007). Industrial parks
244 then were mainly connected to traditional industries and exerted a negative impact on the
245 environment. However, in the 2010s, district governments started to construct high-technology
246 industrial parks in the new wave of industrial upgrading to increase their capacity to attract
247 external high-end investors.

248 In addition to economic development, a people-oriented, low-carbon, green, and ecological path
249 of new-type urbanization and sustainable urbanization has increasingly been emphasized by the
250 Chinese central government in recent years (Wang & Wang 2015). The past rapid economic
251 growth has led to environmental degradation in Wenzhou. This deteriorating environment has,
252 in turn, increased local people’s awareness of the importance of environmental protection and
253 restoration (Kahn 2006). Consequently, the Wenzhou government decided to restore the local
254 ecosystem with the construction of the Sanyang Wetland in the Ouhai district. The land and
255 self-built housing of nine urban villages thus needed to be deconstructed, and the affected
256 villagers needed to be relocated to another area in SLQ village in Longwan district. The
257 municipal government aims to construct the largest relocated new community in that region.
258 The clustered high-rise buildings (HRBs) involved are termed the ‘concentrated village’. This
259 practice was initiated in Jiangsu province in 2001 (Ong 2014). Later, it was widely
260 implemented in other cities, including Wenzhou, during the urbanization process. Clearly, the
261 motivation to redevelop these nine urban villages in Wenzhou is a manifestation of the goals of
262 environmental protection and restoration.

263 The third driver is attributed to the negative impacts of urban villages; for instance, poor
264 planning and the failure of urban governance have led to a disordered physical space and site

265 coverage (Xu et al. 2018). The self-built houses, or ‘handshake buildings’, are in close
266 proximity to one another (Zhang et al. 2003). These high-density urban villages are often
267 associated with living environments and social problems such as declining infrastructure, crime,
268 drugs, public health, fire hazards, and prostitution (Barnes et al. 2006). The dominant neoliberal
269 urban development regime regards urban villages as a social, spatial, economic, and political
270 problem, and as a temporary and improvisational entity that will ultimately be eradicated by
271 urban planners in the urbanization process (Kochan 2015). Therefore, local governments are
272 keen to replace dilapidated urban villages with modern high-rise buildings, together with their
273 objectives of enhancing land-use efficiency and city image. Naturally, the orthodox city
274 planning theory includes the Garden City, Vertical City, and City Beautiful ideas which are
275 accepted by city planners across the world (Corbusier 1970; Howard 1985) and not exclusive
276 for China. UVRPs driven by city image enhancement are often located in the city center, like
277 the case of Lucheng district.

278 Governments worldwide have begun to promote slum demolition since UN-Habitat’s (2003)
279 agenda called for “cities without slums”. The urban village has been described as a pervasive
280 form of “enclave urbanism” during the urbanization process (Douglass et al. 2012). Some
281 studies argue that the entrepreneurial behavior of local governments always places urban
282 growth and profit as priorities in their policies (Jin & Doloi 2008). Local governments initiate
283 UVRPs through collaborating with private developers to gain vast land transfer fees (Lin 2001).
284 Yet, this argument was established from several cases in metropolitan areas and may be
285 applicable to projects developed for commercial purposes only. Its applicability to those
286 projects developed for public interest missions or for economic development purposes is
287 doubtful. According to Article 3 of the Regulations for the Requisition of Housing on State-
288 owned Land and Payment of Compensation, private property may be requisitioned by the
289 government for the public interest for the following seven purposes: 1) for construction of

290 national defence facilities; 2) for delivering public services supported and planned by the state,
291 including energy, transportation and water supply; 3) for meeting the needs of public utilities
292 supported and planned by the state, including science and technology, education, culture, health,
293 sports, protection of environment and resources, protection of cultural relics, social welfare and
294 municipal utilities; 4) for improving the living conditions of low-income families with housing
295 difficulties, to construct social housing, such as economically affordable housing (*jingji shiyong*
296 *fang*), etc; 5) for redeveloping dilapidated housing; 6) for constructing office buildings for state
297 organizations; and 7) for other projects in accordance with laws, administrative regulations, and
298 other requirements for public interest as prescribed by the State Council. To avoid stirring
299 unnecessary debates, ‘public interest’ in this study refers only to the first six specific purposes
300 elaborated in the law.

301 On the other hand, in recent years, sustainable development has been emphasized in the
302 urbanization process of many cities (Tan et al. 2016). Policymakers worldwide are beginning to
303 initiate various projects to create better environmental, social, and economic conditions, and
304 enhancing cities’ attractiveness and competitiveness (De Jong et al. 2015). Analysis of the
305 drivers for implementation of UVRPs in Wenzhou echoes the view of achieving sustainable
306 urbanization. Land assembly for environmental restoration indicates that local governments are
307 also beginning to introduce more socially inclusive policies and transform the previous land-
308 centered urbanization into a more sustainable form of urbanization. The initiation of large-scale
309 UVRPs is very relevant to urban planning strategies for a range of purposes, including
310 industrial upgrading, the sustainability of ecosystems, the construction of public facilities, and
311 the enhancement of cities’ image. The example of practice in Wenzhou suggests that the
312 contemporary objectives of local governments are to redevelop urban villages to maximize and
313 balance the social, economic, and ecological benefits. Similar practices are common in other
314 transforming cities in contemporary China. After illustrating the main reasons for implementing

315 UVRPs, the next section introduces how UVRPs are implemented in contemporary China.

316 **Policy formulation and implementation**

317 The Wenzhou municipal government adopts top-down institutional arrangements to implement
318 UVRPs, wherein the district government is responsible for policy formulation based on upper-
319 level guidelines, and the sub-district governments are responsible for policy implementation.
320 The affected villagers are empowered only to select one suitable compensation and relocation
321 method from a set of designed policies. Policy choices and policy design, being among the
322 formal institutions, need to take account of transaction costs to increase the efficiency and
323 sustainability of policies. A supporting policy is assumed to be implemented more smoothly
324 when the affected villagers are willing to participate in the project, leading to a low level of
325 transaction costs and thus a short project duration. If the villagers are satisfied with the policies,
326 the property right exchange contract is soon signed, indicating a smooth redevelopment process.

327 However, it is not easy to formulate a successful policy, especially when various interests are
328 involved, and disputes can easily occur when property rights are not clearly defined. Most
329 householders have not registered a certificate for their self-built housing in urban villages for
330 historic reasons and due to traditional values. Some villagers told us:

331 As far as I know, some villagers believe that, as they have already had a house in
332 which they can live all the time, there is no need to spend tens of thousands of
333 yuan [CNY] to register a certificate to prove that the houses are theirs (an
334 interviewee from XL village).

335 I have not registered because our family could not afford to pay such a high
336 registration fee at that time. After housing construction, we had spent all our
337 money and even incurred some debts. Later, when we could afford such a sum of

338 money, property registration had become very difficult. Therefore, we gave up.

339 Once it was announced that our village was to be redeveloped, the local
340 government refused to register our property (an interviewee from ZZ village).

341 With the continued urban growth, most householders added further illegal floors to their
342 original housing to maximize their rental income. The Wenzhou government always adopted a
343 relaxed attitude toward those illegal behaviors because the expanded housing helped to
344 accommodate a large number of migrants and provide room for production, which benefited the
345 area's rapid economic development in previous years. Such rebuilt illegal housing, or additional
346 floors, increases the difficulty of defining legal property rights. Neo-institutional economists
347 argue that property rights that are not clearly defined can lead to high levels of transaction
348 costs. Increased certainty can reduce transaction costs. Defining the legal property rights of
349 self-built housing efficiently has become an intractable problem for policymakers. After
350 Wenzhou experienced a huge typhoon in 1994, the government took aerial photographs to
351 evaluate the damage. The municipal government finally determined to use the 1994 aerial
352 photographs, containing aerial views of self-built housing in urban villages, as the time
353 watershed for the definition of legal property rights—that is, houses (including floors) built
354 before 1994, as evidenced by the aerial photographs, are defined as legal property, while those
355 built after 1994 without government approval are defined as illegal. This can reduce the costs of
356 information requisition and the opportunism of villagers in reporting false information, because
357 the government has photographic evidence. The costs of repeated negotiation and possible
358 disputes over the area of housing before and after 1994 can also be avoided, and this is
359 presumed to be a good approach to minimizing social disputes over the ambiguous legality of
360 property.

361 However, the situation is more complex in reality. Merely having a one-size-fits-all policy
362 (*yidaoque*) does not produce an incentive effect, especially for impoverished householders who

363 built only one or two floors before 1994 and many-storied housing after 1994. As a response,
364 the principle of socialist equality is applied in the form of a policy of three times the area of
365 legal building plot (*yisan luodi*): this means that householders can be allocated three times the
366 legal building plot (the ground floor area of their self-built housing) even if their original
367 housing contained fewer than three stories. The legal area-based relocation policy, therefore,
368 enables the affected villagers to be allocated an area at least three times that of their original
369 building plot (see Eq. 1 and Fig. 4):

$$370 \quad \text{Relocation area} = \begin{cases} \text{original legal housing area,} & \text{floor} \geq 3 \\ 3 \times \text{original legal building plots,} & \text{floor} < 3 \end{cases} \quad (\text{Eq. 1})$$

371 [Fig. 4 about here: Compensations for legal and illegal property rights]

372

373 This policy has also met with resistance, leading to holdout problems. This situation is reflected
374 by the information provided by an interviewee from HB village:

375 One nail householder in our village has ten family members and his self-built
376 housing reconstructed six floors [after 1994]. According to the policy, his family
377 can be allotted an area with a maximum of three times the building plot [i.e. three
378 floors]. They refuse to exchange their property rights because the area allocated to
379 them is much smaller than their original one. They believe that the redevelopment
380 will make them worse off (an interviewee from HS village).

381 To smooth the implementation of the policy, the government compromised and created a family
382 size-based relocation principle, according to which collectively owned rural land entitles
383 villagers to an equal share of land resources, and so land allocation, including farmland and
384 building plots, is based on the population growth in villages (Kung 2000). The governments in
385 Hangzhou and Yiwu also use this method to relocate villagers. To avoid the holdout problem,

386 the Wenzhou government also created a third relocation method, the ‘*sanwu diding*’ policy,
387 whereby each person can be allocated a maximum of 50 m² when the area of their legal self-
388 built housing is debatable.

389 In sum, three methods are used to relocate villagers, from which villagers are empowered to
390 choose one to gain the optimal relocation area. Clearly, the latter two relocation methods
391 indicate that the government uses the increased relocation area as its bargaining power to
392 persuade villagers whose original legal housing area is small or whose family size is large to
393 participate in the UVRP. The increased bargaining power reduces the costs of policy persuasion
394 and repeated negotiation, which can smooth the redevelopment process.

395 However, the displaced villagers need to pay the construction fees for HRBs. These
396 construction fees can be divided into two parts. According to the interviewees from 26 urban
397 villages in Wenzhou, the first part, A, is based on the original legal area, which ranges from
398 CNY 3000/m² to CNY 4500/m². This means that, after offsetting the housing demolition
399 compensation, the displaced villagers still need to pay around CNY 300–1500/m² to the
400 government. The second part, B, is based on the ‘supportive area’; it costs around CNY
401 5000/m² to purchase the supportive area. The term ‘supportive area’ denotes the ‘area beyond’
402 (locally called *fankong mianji*), which is the value of the actual original housing area subtracted
403 from that of the relocation area. Accordingly, despite the preferential policy of providing a
404 supportive area for impoverished villagers, they still face a huge financial burden to fund
405 HRBs, and unaffordable construction costs can lead to holdout problems in some UVRPs. This
406 view was confirmed by the last nail household in XB village:

407 We have no money... I also support the UVRP so I can exchange the dilapidated
408 house for a residence in a new high-rise building. After all, my son needs a new
409 apartment to live in but I have no money to buy the ‘supportive area’. The

410 purchase price is CNY 5,000/m². Our self-built house occupies a 170m² building
411 plot. This site has one floor and another has two floors. According to the
412 compensation policy, the relocation area allocated to us is 510 m² [170*3=510]
413 and the shared area (*gongtan mianji*) is equal to 127.5 m² [510*0.25=127.5] with
414 different amounts of construction costs. This means I need to provide around
415 CNY 3 million to purchase the exchange area. Please tell me how I could provide
416 such a sum of money (an interviewee from XB village).

417 This is an extreme case. Since most self-built houses were higher than three floors before 1994,
418 the construction fees that the householders need to pay are much lower than in this case.

419 In fact, the local government actively encourages villagers to choose monetary compensation,
420 as this can both stimulate local real estate development and mitigate the financial burden
421 involved by providing monthly temporary relocation fees (TRFs)—approximately CNY 15/m².
422 Furthermore, the local government bears the high level of stress involved in constructing the
423 HRB within the planned time (from interviewees working in the government departments). If
424 the government fails, it will need to double the TRFs every three years. Therefore, the local
425 government prefers the displaced villagers to choose monetary compensation, which begs the
426 question as to whether the affected villagers actually do so. The fieldwork revealed that the
427 results are mostly influenced by the location of the villages: in situ or nearby replacement in a
428 privileged location leads to a low proportion of villagers choosing monetary compensation, and
429 the reverse is also true. For instance, over 90 percent of villagers chose in-kind compensation in
430 ZY village with a favorable location (from an interviewee from ZY village), while only around
431 20 percent of villagers chose in-kind compensation in DLX village with an unfavorable location
432 (from interviewees from DLX village).

433 However, the local government seeks to expedite accumulation of the rural land with minimal
434 social disputes; therefore, a series of incentive policies have been designed to encourage
435 villagers to move out of their original housing. For those who choose monetary compensation,
436 approximately 25 percent of the total monetary compensation (comprising 10 percent for
437 purchasing accommodation, 12 percent for signing the contract, and 3 percent for vacating) is
438 provided as an incentive, provided that they move out of their self-built house within the period
439 required by the local government. Similarly, for those who choose in-kind compensation, the
440 incentive policies include an additional 50 m² of relocation area and specific monetary
441 compensation used to offset part of the construction costs, as shown in Table 1.

442 [Table 1 about here: Incentive policy for in-kind compensation]

443 **Challenges encountered during the redevelopment process**

444 After reviewing the policies and practices of UVRPs implemented in Wenzhou, this study
445 attempts to explore the barriers for redevelopment of urban villages. As mentioned above,
446 Wenzhou government adopts a top-down institutional arrangement to implement UVRPs, under
447 which the government is responsible for policymaking and implementation. Since villager
448 representatives are absent in the policymaking process, their voices are hardly heard by the
449 policymakers. Relevant issues that the policymakers ignore can easily result in increased
450 transaction costs associated with settling problems at a later stage. Grounded in the original
451 fieldwork, the challenges are summarized as follows, based on the voices of the villagers
452 themselves. The first challenge is related to disputes over the legality of property rights. Most
453 villagers said that using aerial photography from 1994 is not a sufficient basis to define legality.
454 One of the interviewees said:

455 The provincial government in Zhejiang has issued Zhezhengbanfa [2017] No. 43
456 and Zhezhengbanfa [2014] No. 73 notifications on the registration of residential

457 certificates for self-built housing on collectively owned land. The notifications
458 reveal that we can register residential certificates for the unapproved area of self-
459 built housing constructed from 1 January 1987 to 27 March 2014. Clearly, the
460 provincial government wants to protect our property rights. However, the district-
461 level government in Wenzhou does not follow this policy. It has formulated its
462 own policy, Wenlongzhen [2017] No. 15, which states that the provincial policy is
463 not applicable to UVRPs. So, those without residential certificates still cannot
464 register and the state in 1994 is the only basis for the determining the legality of
465 the property rights (an interviewee from XB village).

466 This kind of district government response has produced a series of social disputes and
467 discontentment among the affected villagers, echoing O'Brien and Li's (2006) ideology of
468 'rightful resistance', in which villagers often use high-level government policy to fight the
469 'misconduct' of low-level government. As noted before, the district government is empowered
470 to design the local policy for UVRPs, so its implementation of local policy cannot be regarded
471 as illegal behavior and the resistant voice is soon suppressed. However, the suppression of
472 rightful resistance reduces the government's credibility and devastates its image in the eyes of
473 the public. In addition, the use of 1994 aerial photography to determine legality is not
474 omnipotent and sometimes creates dysfunction. One interviewee commented:

475 Our self-built house had three floors before 1994 but the third floor was destroyed
476 by a typhoon. Thus, the house had only two floors on the 1994 aerial photograph.
477 According to that photo, the local government only counts two floors as legal,
478 which is unfair ... I will not sign on the contract if the local government does not
479 count the house as having three floors (an interviewee from SJ village).

480 Another conflict regarding a self-built house rebuilt after 1994 occurred in one of the surveyed
481 villages. One indigenous villager told us the whole story about the conflict:

482 I knew one elderly male householder in my village whose two-story self-built
483 house was demolished and rebuilt with five floors without a residential certificate
484 around three years ago. His family is not wealthy... According to the prevailing
485 policy, the legality of the relocation area is based on the 1994 aerial photographs.
486 Thus, the upper three floors were regarded as illegal property with the paltry
487 compensation of CNY 200/m². The deadline for the contracting date set by the
488 local government was 25 June 2017, and the government told him that if he did
489 not sign the property right exchange contract, the three illegal upper floors would
490 be forcibly demolished first. Due to the great stress exerted by the local
491 government, the property owner compromised and reluctantly signed before the
492 deadline to enjoy the aforementioned incentive policies. However, he felt very
493 upset afterwards, always muttering ‘where can I live after the demolition ... where
494 can I be buried when I die?’ The situation became even worse when he tried to
495 rent a house but was refused by the landlord who was afraid that the old man
496 would die in her house because of his age. After this rejection, he was shocked
497 and felt even more depressed... In the afternoon of 28 June 2017, he hanged
498 himself in his room and was found dead by his wife when she returned home.
499 More than 20 of his relatives protested on the street and put his dead body in front
500 of the demolition office to signify that his death was attributable to the behavior of
501 the local government in coercing his signature. However, the protesters were soon
502 arrested by the police. Ultimately, the government provided CNY 20,000 and the
503 VCs provided CNY 30,000 as a condolence to the elderly householder’s family.
504 To date, the government still claims that it has no fault and denies that the death of

505 the householder was the result of the government's forcible demolition. The
506 excuse given by the local government is that the elderly householder's death
507 occurred after the date he signed the contract, which indicates that he agreed to the
508 content of the contract. Thus, his death has nothing to do with government
509 behavior (an interviewee from SB village).

510 Although there seems to be no clear causal relationship between the UVRP and the elderly
511 householder's death, it is likely that the redevelopment greatly stressed him. After demolition,
512 the relocation area was much smaller than the area of his self-built house. It also aggravated the
513 financial burden on this family because of the high construction costs involved, added to the
514 debt that the family owed previously and the rental income that it would lose after the
515 demolition. From his words 'where can I live after the demolition ...', we can deduce that the
516 stress also stemmed from the underdevelopment of the elderly temporary relocation housing
517 (ETRH) for people over 70 years old. Other interviewees said:

518 Although some buildings in the village are planned for the elderly, the living
519 environment is rudimentary, with the absence of private toilet and lift. Such poor
520 provisions are greatly inconvenient for elderly people. The local government
521 should construct ETRH that is suitable for the elderly to live in (an interviewee
522 from SB village).

523 I think the most important issue during the redevelopment is that the government
524 should pay attention to the living status of elderly villagers. It is very hard for
525 them to rent a house after being displaced. If our elderly parents do not live well,
526 how can we live well and support the UVRP (an interviewee from HB village)?

527 As villagers also care about their parents' living conditions, the issues surrounding ETRH are
528 among the main causes of social disputes in most of the Wenzhou villages surveyed.

529 Sometimes the local government is insensitive to the demands of villagers, leading to resistance
530 at a later stage. However, the construction of ETRH at an earlier stage can mitigate villagers'
531 concern after demolition, leading to low costs of negotiation and policy persuasion. Low
532 transaction costs generally result in a smooth redevelopment process. For instance, when the
533 sub-district government planned to construct ETRH in CD village located in Wenzhou's
534 Sanyang Wetland, as shown in Fig. 5, the villagers soon signed the contract for property right
535 exchange.

536 [Fig. 5 about here: ETRH in CD village (taken by the first author in July 2017)]

537 The third challenge encountered during the redevelopment process is villagers' financial burden
538 to fund the construction costs of relocated high-rise buildings. It is unaffordable for
539 impoverished households, especially for those that need to purchase a large supportive area, as
540 mentioned above. Wenzhou is an immigrant city with great opportunities for indigenous
541 villagers to earn extra income by renting out their unused rooms. The family-based economic
542 development indicates that most villagers utilize their ground floor to manage their businesses,
543 such as clinics, supermarkets, drugstores, hotels, and so forth. Obviously, demolition has a
544 negative impact on their business and disrupts their daily life. An interviewee grumbled:

545 I used the ground floor of our house to run the clinic rent-free, but the UVRP
546 forced me to rent another place for my clinic. Our family relies on this clinic to
547 support our long-term livelihood so I could not lose it. Although I can continue to
548 run my clinic in another place temporarily, I feel sad that I have to pay
549 approximately CNY 50,000 per year to rent an area of 50–60 m². This means
550 some of my work does not have real payoff (an interviewee from HS village).

551 As revealed in the fieldwork, the construction fees in Hangzhou and Taizhou are much lower
552 than in Wenzhou. The difficulty is increased further by the government policy—that is,

553 villagers can only choose either monetary compensation or in-kind compensation, but they
554 cannot choose both. Therefore, when impoverished householders want to choose in-kind
555 compensation but cannot afford the construction fees, then a dilemma is created. Such a
556 situation could be avoided if the government allowed affected villagers to choose both at the
557 same time. Sometimes, the production costs and transaction costs are intertwined. High
558 production costs, such as construction fees, can increase transaction costs, such as negotiation
559 costs. Although villagers also need to submit construction fees in Hangzhou, Yiwu, and
560 Taizhou, they are allowed to choose both to mitigate their financial burden. Through this
561 approach, impoverished villagers can use monetary compensation to fund the construction fees
562 of relocated high-rise buildings. In addition, other practices include transferring the
563 construction fees from the villagers to the government or a third party. For instance, the
564 villagers in the main urban area, Ningbo, do not need to fund the construction fees but they do
565 not receive any monetary compensation for the decoration of the original housing. This can
566 save the costs of repeated negotiation and conflict resolution during the measurement process.
567 Other examples of transaction cost minimization practices include the bottom-up institutional
568 arrangement—that is, the government in Xiangshan county allows VCs to cooperate directly
569 with the private developer, as a result of which the private developer meets all the costs during
570 the redevelopment.

571 The above analysis based on villagers' views is one-sided. To have a deep understanding of the
572 challenges arising during the redevelopment process, the voices of government officials should
573 also be heard. Some government officials blame unruly villagers or nail householders for the
574 mean requirements, which makes the policy difficult to implement. Two government officials
575 interviewed said:

576 Some villagers grasp this chance to bargain for more benefits from the
577 redevelopment process. This may be their last chance in their life. I will tell you a
578 true story that will make you laugh your head off. In one village, a woman's
579 uterus was removed because of disease. According to the policy, we should give
580 special consideration to the disadvantaged group so we compensated CNY 50,000
581 more to this family as condolence. The news was soon disseminated, and some
582 elderly women without any disease within or around the village went to hospital
583 to take their uterus out in order to gain the CNY 50,000 (an interviewee from the
584 government at the province level).

585 Demolition is one of the most challenging issues in the world. Some unruly
586 villagers impede the redevelopment process. They do not obey the rules
587 articulated in the policy. For instance, we announce very clearly at the beginning
588 that the allocation of the apartment of relocated housing is based on the drawing
589 of lots but the unruly villagers do not move in when they are allocated unwanted
590 floors or directions of apartment (an interviewee from the government at the
591 district level).

592 However, not all villagers' demands are unreasonable. Some government officials, especially
593 from the frontline, describe another picture. They argue that the barriers to implementing
594 UVRPs are caused by the policy itself. More specifically, the policy is unfair or overlooks the
595 interests of some villagers. A sub-district level government official told us:

596 I am the frontline policy implementer. I have to admit that sometimes the policy
597 is very difficult to implement because the policy itself is not well accepted by
598 the villagers. The policymakers are often from the upper level but they rarely
599 directly participate in the UVRPs. Therefore, they do not know what villagers

600 really want... We have so many policies we need to refer to and some of them
601 are in conflict with others (an interviewee from the government at the sub-
602 district level).

603 However, even when the low-level government reports those policy problems to the upper level
604 of government, some problems still could not be settled. Furthermore, the cost of changing the
605 policy is high. According to their experience, policymakers believe that what villagers care
606 most about is fairness, which is a valuable concept in Chinese traditional culture. As Confucius
607 stated, inequality rather than want is the cause of trouble. Therefore, in government-led UVRPs,
608 the policymakers prefer to ‘policy continuity’—that is, policymakers keep most of the content
609 of old policies when designing a new policy. Because the policy credibility and consistency can
610 influence the transaction costs of the policy implementation (Shahab, Clinch, & O’Neill 2018).

611 An interviewee said:

612 We admit that the policy itself has some problems, but the cost of changing the
613 policy is very high. I will give you an example so that you can understand.
614 Different urban villages evolved in different years. Ten years ago, some urban
615 villages were redeveloped following the old policy, and some villagers still have
616 not been relocated. As time goes by, when a new urban village needs to be
617 redeveloped, if a new policy is much better than the old one, villagers affected by
618 redevelopment projects following the old policy will resist and demand the same
619 treatment... It might even cause social unrest that we also do not want to see.
620 Generally, we allow the sub-district governments to design their own policies,
621 called ‘local policies’, according to their own special situations to calm conflicts
622 (an interviewee from the government at the province level).

623 Therefore, a potential lock-in effect is resulted from the implementation of the UVRPs. This
624 dilemma of implementing policy continuity echoes what North (1990) called institutional
625 equilibrium. In such a situation, North (1990, 98) argues that “it does not imply that everyone is
626 happy with the existing rules and contracts, but only that the relative costs and benefits of
627 altering the game among the contracting parties do not make it worthwhile to do so.”

628 **Conclusion**

629 This research contributes to the holistic understanding of the drivers and barriers for the
630 government-led UVRPs in contemporary China. From a new institutional economics
631 perspective, it first provides evidence that the government’s role in UVRPs is still dominant
632 based on an analysis of 394 UVRPs collected in Zhejiang province. In addition, the analysis of
633 the UVRPs in Wenzhou city reveals that the needs to enhance cities’ comprehensive capacities
634 to attract external investors and high-end immigrants in the face of increasingly fierce
635 competition among cities and to avoid becoming ghost cities are key drivers for UVRP
636 implementation. We argue that the objective of local governments is no longer simply to obtain
637 high land transfer fees through cooperation with private developers, but rather to redevelop
638 urban villages to maximize and balance the social, economic, and ecological benefits to achieve
639 people-oriented sustainable urbanization and new-type urbanization.

640 The redevelopment needs the affected villagers to participate voluntarily in the project. Based
641 on the fieldwork conducted in 26 urban villages in Wenzhou, this study explores how policies
642 of urban village redevelopment are formulated and implemented to encourage villagers’
643 participation. Transaction costs should be accorded due consideration when designing policies.
644 Under the top-down institutional arrangement, the government at the upper level is responsible
645 for policy formulation but the policymakers rarely directly participate in the UVRPs. Therefore,
646 the challenges arise during the redevelopment process. To identify the barriers, this study

647 conducts in-depth personal interviews with both villagers and government officials. According
648 to the villagers, the first challenge is related to the definition of legal property rights. Since land
649 and housing property rights in urban villages are ambiguous and incomplete, the area between
650 the legal and the illegal has often become the source of disputes when implementing UVRPs,
651 leading to high costs of repeated negotiation, information requisition, and conflict resolution.
652 Sometimes the policies designed by the low-level government deviate from the policies of the
653 upper-level government. The affected villagers use the upper-level government policies to resist
654 the policies designed by the lower-level government to maximize their interests, demonstrating
655 a kind of ‘rightful resistance’. The second challenge is related to the construction of ETRH. If
656 the government does not construct ETRH, the uncertainty involved in searching for temporary
657 rental housing for elderly villagers will increase. The increased uncertainty will generate a high
658 level of transaction costs for uncertainty reduction. The villagers normally use the property
659 rights contract as their bargaining power to negotiate with the local government to settle the
660 problem; otherwise, holdout problems will arise. The high costs of repeated negotiation are
661 more likely to produce a long project duration and forced eviction is likely to provoke
662 resistance or even violent conflicts. The third challenge is related to the high construction fees
663 for relocated high-rise buildings. The findings may present evidence that production costs and
664 transaction costs are intertwined. High production costs—namely high construction fees—can
665 also induce high transaction costs.

666 According to the government officials interviewed, some challenges are attributed to the unruly
667 villagers or nail householders whose demands are beyond comprehension. This will increase
668 the unexpected economic and transaction costs to settle the relevant issues. The government
669 officials at the frontline admit that some problematic policies impede the implementation of the
670 UVRPs. If policies are not grounded in the needs of villagers, the transaction costs used to settle
671 disputes in the later stage of policy implementation will increase. When a dilemma occurs, the

672 policy implementers have no right to decide to alter the policy, but instead call for instructions
673 from the upper-level government through a time-consuming administrative process. Sometimes,
674 policy implementers choose to enforce the policy strictly, leading to a high level of violent
675 conflict. However, policy alteration is also related to social costs. Thus, the lock-in effects
676 occur and the upper-level government prefers the policy continuity due to the high costs of
677 policy change, which echoes the concept of institutional equilibrium put forward by North
678 (1990).

679 **Data Availability Statement**

680 All data used during the study are confidential in nature and may only be provided with
681 restrictions. All interview response data for this study are not shared in order to protect
682 anonymity of the interviewees.

683 **Acknowledgements**

684 Sincere thanks are due to the officials who explained to us the basic policies regarding
685 compensation and relocation. Our thanks are also extended to those anonymous displaced
686 villagers who cooperated with us in the interviews. This work was supported by the National
687 Natural Science Foundation [Grant Project No. 41371187], the National Social Science
688 Foundation [Grant Project No. 16ZDA020], Philosophy and Social Sciences of Guangdong
689 Province [Grant Project No. GD19YGL16], Jinan University Startup Foundation [Grant Project
690 No. 55800001], Humanities and Social Science Foundation of Ministry of Education of China
691 [Grant Project No. 16JJD840011] and National Philosophy and Social Science Foundation of
692 China [Grant project No. 14BSH108].

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Table 1. Incentive policy for in-kind compensation

Signature and vacation rate	Three or five nearby households	70%–95%	95% or above
Incentive	CNY 600/m ²	CNY 800/m ²	CNY 1000/m ²

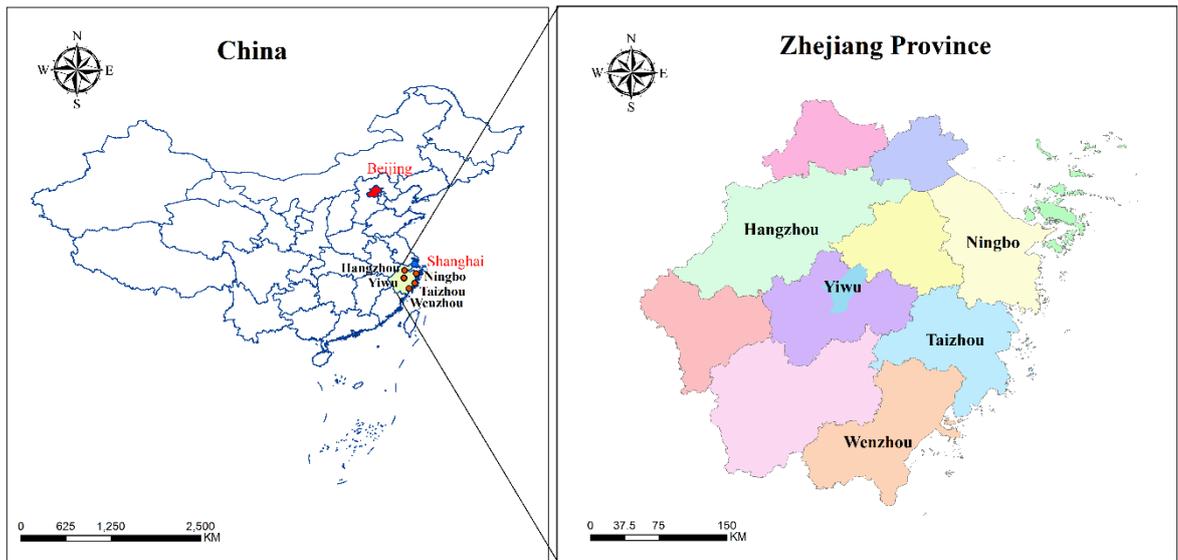


Fig. 1. Geographic locations of the five cities

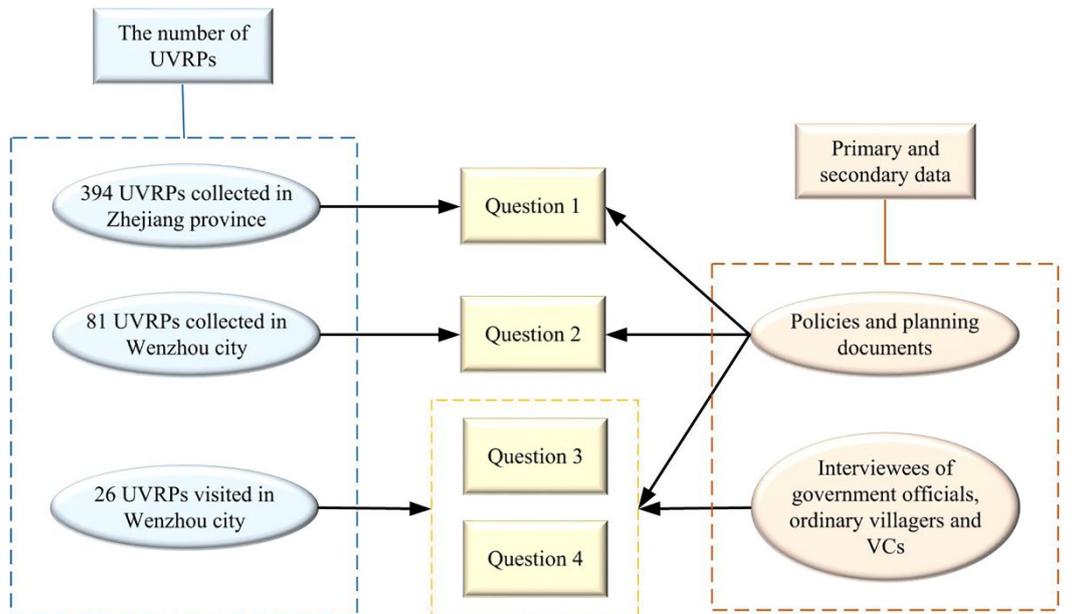


Fig. 2. The roadmap of research design

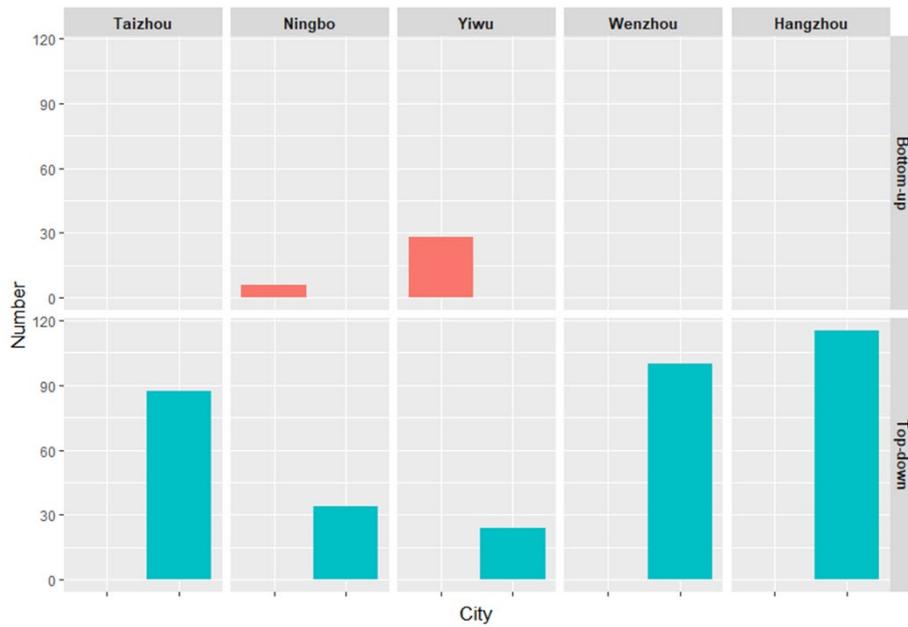


Fig. 3. Institutional arrangements of the UVRPs in the five cities

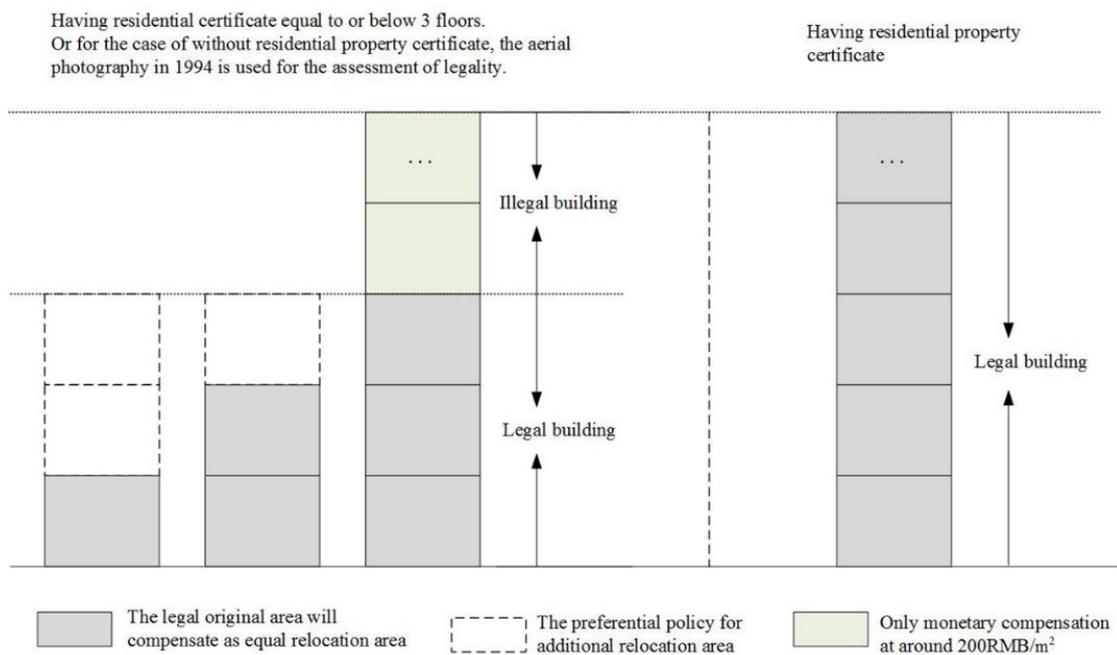


Fig. 4. Compensations for legal and illegal property rights



Fig. 5. ETRH in CD village (taken by the first author, July 2017)