Predicaments and Landscape Changes in Traditional Village Transformational Development - A Case Study of Chongqing, China

Jing Zhang
Faculty of Architecture and Urban Planning, Chongqing University, Chongqing, P. R. China
angeling1107@foxmail.com

Abstract. The protection of traditional villages plays an important role in the strategy of inheriting Chinese outstanding history and culture, and it is also an important type for the transformation and development of traditional farming civilization to modern ecological civilization. In this paper, it is held that, currently, traditional village transformation and development follow the laws of policy orientation attracting capital intervention, capital intervention promoting village development, and village development supporting policy orientation in turn with actual internal forces, realizing a ternary integrated development path for the country, market, and village. Based on the logic inference and deduction on the three-dimensional path driven by departmental policy capital, urban industrial and commercial capital as well as rural community and owned capital, a series of typical cases of Chongqing are selected for demonstration. Studies show: (1) At this stage, traditional village transformation and development will inevitably be driven by both internal and external forces, since the driving power of one single force is limited. Only by conforming to external driving forces such as policies and capital and internal endowments of village resources, culture and economic foundation, can the predicament in traditional village transformation and development be overcome; (2) The key to realizing rural transformation and development lies in stimulating internal driving forces of villages. Economic reconstruction with industry cultivation as its core is the most active factor in rural development, and it plays a leading role in social and landscape reconstruction; (3) Historical rural landscape is an important resource for the transformation and development of villages. Therefore, both macro policies and regulations and capital intervention should be based on a full understanding of the value of historical landscape, and a thorough and true cognition and evaluation on the composition and characteristics of historical landscape.

1. Introduction
Since the 1990s, the human-environment relationship and development in China’s rural areas have changed dramatically, shaped by national institutions, driven by external demands, and impacted by internal elements [1]. Due to interventions by multiple actors, rural development elements and geo-spatial patterns are experiencing varying degrees of reconstruction [2]. Traditional villages symbolize traditional farming civilizations and preserve historical culture. As a specific village type, they have been greatly affected by the development of market-oriented economy, the urban-rural flow of development, and many other factors in recent years. As a result, new economic opportunities (such as heritage tourism, agricultural sightseeing, and leisure experiences) have gradually appeared, exerting an intense influence on village social structure, spatial form, and rural landscapes [3]. In this process, the interactions between
various efforts driven by policies and capitals have promoted differentiated village development. In some villages, traditional village conservation and rural tourism development have accelerated the flow of production factors and significantly improved the residential environment, accompanied by changes in the rural landscape [4]. However, the transformational development of traditional villages also faces some problems, such as the rural hollowing [5], and unsustainable tourism development [6].

In recent years, many studies have explored the evolution and spatial characteristics of traditional villages. They have primarily focused on the spatial distribution of traditional villages [7], the evolution of settlement patterns [8], and the field of landscape conservation [9]. Studies on traditional village development mainly involve conservation planning strategies [10], tourism development models [11], conservation implementation systems [12], etc. However, existing studies have rarely explored village landscape changes from the perspective of the paths and driving mechanisms of contemporary village transformational development. At present, rural transformational development is necessary for social-economic development and improving livelihoods in traditional villages. Besides, it is of vital significance to identify realistic development paths and driving factors, as well as the change processes in contemporary rural landscapes, as this can promote the integrated conservation of historical landscapes, improve sustained ecological, social, and economic development, and revitalize traditional villages [13]. With this in mind, this paper considered theoretical model and actual situation in the transformational development of contemporary traditional villages, and selected two typical villages of Chongqing as study cases, to answer the following questions: What are the differences in the development processes and landscape changes of different villages driven by departmental policy capital, urban industrial and commercial capital, and residents’ self-owned capital? What are the mechanisms that drive such differences? What are the policy implications of these mechanisms?

2. Theoretical Model and Actual Situation in the Transformational Development of Traditional Villages

Along with the modernized transformation of agriculture and villages, the urban-rural flow of development, cultural integration, and the tightening of social relations have helped shift traditional villages into new urban-rural patterns. In the context of new socialist countryside construction, market-oriented rural economic development and social modernization are constantly impacting the old residential environment systems of traditional villages, prompting them to assume diversified instrumental values assigned by the era. Currently, the conservation and inheritance of traditional village historical culture have been elevated to China’s Development of an Ecological Civilization. Historical conservation and land policies have had strong effects on village transformational development and fiscal transfer payment has become a main source of funds supporting village construction. Meanwhile, driven by tourism consumption and conservation and development policies, urban industrial and commercial capital and residents’ self-owned capital also promote village development through various channels, advancing the functions of traditional villages in tourist attraction-oriented and community-oriented directions. This has also directly caused land use and landscape change in traditional villages, leading to their transformational development. For this reason, this paper assumed that traditional village transformational development follows an ideal model. That is, policy guidance attracts capital involvement, and capital involvement then promotes village development, which in turn supports policy guidance with endogenous forces, thus creating a state-market-village “three-in-one” development path (Figure.1). However, the three driving forces (i.e., departmental policy capital, urban industrial and commercial capital, and residents’ self-owned capital) are not synchronous, as they have their own operating mechanisms and logic. For example, one driving force may be too powerful and take a dominant position. In that case, it becomes the dominant mechanism for land use and landscape change, which thus determines the direction of village development.
2.1. Influence of departmental policy capital

The influence of departmental policy capital begins with the input of departmental funds. Fiscal transfer payments under national policies intended to benefit farmers serve as a motivation and basis for grassroots governance around project planning. When preparing annual village construction and development plans, town (township) governments and village committees apply for village construction funds from higher level governments. Therefore, national and local policies have a direct influence on construction project development. The funds invested in traditional village conservation mainly come from the Ministry of Construction and the Ministry of Environmental Protection. To apply for environmental protection department funds, villages have developed channel improvements, water source conservation areas, refuse disposals, and other related projects. To apply for funds from construction departments, they have launched village renovations, residential environment improvements, traditional architecture repairs, and other related projects. Inputs in infrastructure construction of this type are very effective in that they not only solve prominent living problems faced by villagers, but also produce visual results that can be presented to superiors. Thus, when traditional villages are guided by conservation and development policies, funds are mainly used for improving village infrastructure.

While grassroots governments prepare to apply for funds, the department heads and experts from national and local governments are responsible for evaluating the feasibility of such plans. In this case, the department heads and experts on village values decide whether a project is ready for implementation. According to an analysis of the Standards on Evaluation of Traditional Villages, the “visible” heritage values of rural landscapes are very important, and the spatial forms, street patterns, traditional dwellings, and historical architectures of villages have become key objects of protection. In addition, due to historical, aesthetic, scientific, and other intrinsic values, great importance is attached to the conservation and reuse of tangible heritages. Village intrinsic values tend to transform into social, educational, and other non-use values. With the improvement of village infrastructure, cultural heritages of traditional villages are an increasingly obvious attraction. In fact, traditional villages have emerged as a main rural tourism destination. Villagers gain benefits from such rural or heritage tourism. These benefits not only improve villagers’ livelihoods, but also provide a basis for the government in deciding whether to further fund village investments (Figure.2).
In general departmental policy capital has the main influence on traditional village conservation and development in the current stage, and most villages hope to rely on it for developing their economy. However, there are two contradictions in the policy-guided cycle: First, village construction projects are aimed at passing their assessment, so they are usually can't meet the actual needs of villagers. As a result, village infrastructure construction often follows indicators and ignores the practical needs of villagers. Second, in a guided development cycle, tourism development is highly random and spontaneous, and the benefits gained by villagers are unstable and insufficient to keep them in villages. That means that tourism development is not able to fully alleviate labor shortages. In the end, a village may have become more attractive but remains unpopular.

2.2. Influence of urban industrial and commercial capital
The influence of urban industrial and commercial capital begins with capital inputs that are concentrated within the following two aspects. The first relates to the renovation of rural spaces. In general, rural spaces with unique resources (such as climate, landscape, and culture, as well as institutional innovation and social capital accumulation) are prioritized by capital investment. Relying on symbolic renovation, rural spaces are adapted to the consumption habits and demands of contemporary urban consumers, and homestay hotels, shops, bookstores, coffee houses, exhibition halls, and other architecture with regional symbols have emerged as new landscape elements in traditional villages. The rural landscape is produced in the form of consumption-oriented spaces.

The second aspect stresses the heightening of a regional cultural atmosphere, and is particularly important in consumer society. When edited and dramatized rural information (concepts like “hometown”, “nostalgia”, “mystery”, and “exotic charm”) is assigned values like commodities, it soon permeates into all kinds of media after being integrated by extraordinary mass media (WeChat, vlogs, and advertisements). In this case, the cognition and evaluation of media about village values are followed by the creation of consumption-oriented spaces. Due to aesthetic, cultural, and other intrinsic values, urban industrial and commercial capital inputs pay closer attention to landscape consumption-oriented renovation. Thus, guided by mass media about the values of traditional villages, intrinsic values tend to transform into tourism market, commercial, external, and other use values. During landscape renovations, villagers also become an important profit-making group, and both the urbanization of space and the pursuit of profit urge them to rediscover the villages where they grew up (Figure.3).
Overall, the capital involvement cycle is the path for mature tourism destinations in the current stage. While only very few villages are able to attract urban industrial and commercial capital, most villages hope to rely on this driving force for developing tourism. However, there are two contradictions in the capital involvement cycle: First, consumption-oriented space production targets external demands. As a result, rural landscape renovation tends to be over-commercialized and gentrification, which ultimately accelerates the alienation of already fragmented rural culture. Second, in the capital-guided development cycle, tourism development is unsustainable and the consumption-oriented space production crisis of the rural landscape is, to a large extent, an inevitable capital-driven result. The capital appreciation cycle in rural areas exposes some rural spaces to the problem of over investment for the pursuit of monopoly rent. Eventually, this will jeopardize the sustainability of rural development, and lead to an alienated rural revitalization [6].

2.3. Deducing the influence of village community groups and self-owned capital
The endogenous development cycle of villages starts with improved villager livelihoods by town (township) grassroots governments. The first step is actually the hardest. Existing village endogenous development models have not yet formed an extensive demonstration path that involves the strengthening of the collective economy based on specialized cooperatives, attempts at rural internal finance based on mutual fund cooperatives [14], or the sustainable revitalization of village spaces, society and spirit through rural tourism [15]. However, the original intention usually comes from endogenous forces driving villages to seek self-development. This is where the endogenous village development cycle differs from the two previous cycles.

When investment is made to improve villager livelihoods under the internal driving forces of grassroots organizations, living conditions are improved. Only on this basis can communities understand and support the values of the rural landscape. Social, spiritual, historical, and other intrinsic values in rural landscape conservation and use mean that villagers are more willing to conserve tangible cultural heritages and share their stories, legends, and customs with others. Thus, village intrinsic values transform into daily use, social, and spiritual values, as well as other use and non-use values. Only in this way can tourists get the real cultural heritage experience from rural tourism (Figure.4).
Figure 4. Influence of village community groups and self-owned capital in traditional village transformational development

Overall, the driving logic of village community groups and self-owned capital is theoretically the most ideal development path, but nevertheless a difficult one for conserving and developing traditional villages. First, in the current stage, small farmers have little production surplus and it is very difficult to rely on them for developing the village economy and paying cooperation costs. This calls for external forces other than farmers themselves, which inevitably increases the external advantages of policy guidance or capital involvement, and requires proper management and control over external forces. Second, many villages currently view rural tourism as the only path toward livelihood improvements in the endogenous development cycle. However, without the under-standing and support of villagers and village communities, it is impossible to give full play to the tangible and intangible heritages of villages in heritage tourism. As a consequence, rural tourism is rootless, and cannot even be organized or launched.

3. Evolution and Rural Landscape Changes in Typical Villages

3.1. Selection of typical cases

The two practical cases selected in this paper, Xinjian Village and Hejiayan Village (as described in Table 1), are located in Qianjiang District and Youyang County of southeast Chongqing, respectively, in the Wuling mountainous area. This area is covered by mountains and hills, as well as intertwined mountain springs and rivers. Having a favorable natural environment, it is a national key ecological function area and an important biodiversity reserve. In addition, it is also a concentrated area of Tujia, Miao, Kelao, and other ethnic minorities. Due to dangerous natural barriers and poverty issues, there are many traditional villages of ethnic minorities. In recent years, Chongqing has focused on environmental conservation and rural tourism, and taken measures (such as folk culture tourism and poverty alleviation) to accelerate the transformational development of rural areas in southeast Chongqing. We selected the two villages based on the following considerations: First, they are both in the Chinese traditional village directory. Second, after years of development, their rural tourism and leisure agriculture have reached certain levels. Third, they represent two different traditional village development paths. In 2009, Xinjian Village of Qian-jiang District used its unique tourism resources as a village of ethnic minorities and

| Village Name | Nationality | Resident Population | Village area (sq.km) | Village Income (Yuan) | Per Capita Income (Yuan) | Leading Industries |
|--------------|-------------|---------------------|---------------------|-----------------------|-------------------------|-------------------|
| Xinjian      | Tujia       | 1819                | 31.8                | 2,853,000             | 3,150                   | Tourism, Planting |
| Village      | Hejiayan    | 1800                | 20                  | 3,550,000             | 6,232                   | Rice Planting     |


launched its transformational development. Hejiayan Village of Youyang County started its transformational development in around 2011, mainly relying on its high-quality rice resources. In the following section, case studies are performed to analyze the transformational development and three-type landscape changes in the two villages by stages in the past decade, and identify the underlying origins. We used in-depth interviews, data collection, questionnaire surveys, and other methods (Figure 5).

3.2. Xinjian Village- village changes under tourism policy guidance

Xinjian Village is located at the border of Chongqing and Hubei Province, and northwest of Xiaonanhai Town, Qianjiang District, Chongqing, close to Xiaonanhai National Geological Park. According to historical records, the 13 stockades formed during population migration from Hunan, Hubei, Guangdong, and Guangxi to Sichuan in the early Qing dynasty. About 80% of villagers are Tujia people. These stockades are distributed in terrain characterized by one stream surrounded by mountains. Located on flatlands or slopes, they have different patterns and abundant well-arranged traditional settlement spaces.

3.2.1. Staged characteristics of village transformational development. In field surveys and interviews, many local groups referred to Xinjian Village as a stellar village with many fiscal subsidy sources. Located within the Tujia & Miao Eco-cultural Protection Zone in the Wuling mountainous area, it is also an important water source conservation area in Qianjiang District. In October, 2009, the Ministry of Finance and the State Ethnic Affairs Commission listed Xinjian Village in the first set of 100 villages with ethnic minority characteristics for conservation and construction, and launched the conservative development of 13 courtyards over an area of 6.5 km² in this village. Later Qianjiang District invested 28 million Yuan to renovate the 13-stockade tourist attraction, renovating 307 dwellings and introducing Tujia ethnic elements into newly built or renovated rural dwellings. Village-level roadways were hardened and trails paved with slate roads over an area of 6,800 m². In addition, the village folk museum received special fund subsidies in the amount of six million, which were used to build its exhibition center, reception center, and ethnic customs arena. Villagers also opened 10 inns. This initial stage in the conservative development of Xinjian Village mainly focused on the improvement of infrastructure (such as roads and dwellings) and the building of the museum. The orientation of Xinjian Village by government departments and experts took Tujia ethnic customs as its most important value and aimed to directly transform it into tourism market value.

In 2015, Xinjian Village was listed among national tourism poverty alleviation pilot villages by the State Council Leading Group Office of Poverty Alleviation and Development and the National Tourism Administration, and received a three million Yuan rural tourism poverty alleviation fund. This fund was mainly used to construct the Waving Dance Arena and the Wind & Rain Lounge Bridge. Xuetangwan Courtyard was protected by reconditioning its facades and repairing the major parts containing Tujia cultural elements. Local restoration was provided and specific Tujia cultural elements were introduced near stockades and courtyards. In the same year, Xinjian Village was listed in the Chinese traditional
village directory. The Ministry of Housing and Urban-Rural Development and the Ministry of Environmental Protection granted three million Yuan for traditional village conservation. Chongqing Municipal Construction Committee also allocated 12 million Yuan to build a pilot site for traditional village conservation and development. A fund of about two million Yuan was also allotted for improving the village environment with ethnic minority characteristics. These funds were mostly used to improve the physical environment and build a village tourist attraction. The village also constructed new ecological riverbanks, improved the environment of the Banjia Stream, built sanitary toilets for 60 households. Other projects completed in this stage also included five parking lots and 63 km of asphalt roads. This acceleration stage of the conservative development of Xinjian Village stressed the Tujia cultural characteristics through the symbolic presentation of settlement spaces, the use of the settlement landscape, etc. The village also improved its residential environment and livelihoods.

After 2017, with Xiaonanhai Characteristic Eco-cultural Tourist Attraction emerging as a national tourist attraction, the tourism development of Xinjian Village entered its upgrading stage by leveraging its inn resort economy. Xinjian Village built a star-level agritainment resort cluster integrating dining, accommodation, and entertainment functions in Zoumaba, and introduced the agritainment resort demonstration households + ordinary households model (the latter provides raw materials and labor, the former processes raw materials into finished products and sells them). Goats and rabbits were reared in the mountains of five stockades (including Dawan Courtyard, Tan’s Courtyard, and so forth) to provide fresh ingredients for agritainment resorts. Courtyards such as Xuetangwan and Laoxiongba prepared dried vegetables, preserved vegetables, pickles, salted vegetables, and other farm specialties, and provided catering services. In this stage, there were a total of 56 households providing 401 beds for rural tourism services and 12 of them were demonstration households. Tujia Sports Arena and “Floral Valley” projects were also launched in succession. Contests were held regularly to promote folk song culture; Tujia sports activities were organized to promote sports culture.

3.2.2. "Three-type" village landscape changes. Natural habitat landscape: The “landscape and idyll” ecological pattern of Xinjian Village was basically stable. The vegetation covering the mountains on both sides was well maintained, and agriculture and forestry patches were still dominant factors in the landscape. Field roads, production roads, bridges, canals, and other corridor landscape components were also in sound condition. Current tourism trail construction had little interference in the overall natural environment, except that the urban landscape techniques adopted for the “Floral Valley”, climbing trail, and observation deck at the entrance of the tourism attraction were somewhat abrupt. The most obvious environmental interference was surface hardening for farmland infrastructure. In addition to the large-scale adoption of slate to harden field roads and bridges, cement was also used for canal hardening, which intensified the hardened surface influence on farmland ecosystems.

Residential landscape: The 13 stockades had different residential landscapes. In Xuetangwan, Old Street, and other local segments at the entrance of the 13 stockades, there were many new dwellings spreading along the roads. They basically adopted brick-concrete structures, but to inherit the style of local Tujia traditional architectures, their facades uniformly used wood-like decorations. Agritainment resorts were concentrated in this area and served both residential and catering functions. Tourists usually spent most of their time on the contemporary rural landscape. With the involvement of heterogeneous elements in contemporary tourism landscapes, business signs, parking lots, folk squares, and other elements were common. The settlement clusters far from the entrance mostly retained their historical residential landscape patterns and new dwellings were rarely used for tourism reception. The iconic landscape elements in these villages, such as gates and bridges, were all newly built for tourism development. However, villager daily life is profoundly affected by the Han nationality and their ethnic characteristics are largely presented in the form of exhibition and performance. For instance, furnishings in non-tourism dwellings retain the traditional style, while dwellings used as inn resorts tend to follow the urban style. Some of them compromise by setting a shrine and a fireplace in the central room and arranging other rooms as standard double rooms. Except during exhibitions and performance of folk songs and waving dance, villagers basically wear Han-style clothes.
Economic production landscape: The economic production landscape of Xinjian Village has changed dramatically. With recent large-scale commercial crop planting, the already fragmented farmland landscape became increasingly structured.

3.2.3. Value predicaments in traditional village conservation. Tourism development in Xinjian Village has no doubt been very fruitful. In the past decade, thanks to the boom of Xiaonanhai ecotourism focused on Tujia ethnic customs, Qianjiang District built 13 stockades along the Banjia Stream into the largest settlement of Tujia people exhibiting the Tujia landscape and customs. A rich diversity of tourism activities were also organized at attractions and scenic areas. Meanwhile, policy guidance (such as ethnic, historical conservation, agricultural, and poverty alleviation policies) and funding have also supported the construction and development of village infrastructure. From the tourism development perspective, the unique natural habitat selection and stockade distribution pattern of Xinjian Village, as well as the native language, clothes, activities and living habits of the Tujia people, have had high tourism market values and their transformation to use values has been successful.

On the other hand, Xinjian Village tourism development was directly related to landscape changes and the contradiction between tourism and cultural preservation. To fully explore the tourism potential, tourism activities organized by Xinjian Village after entering the upgrading stage exceeded conservative controls and turned the rural landscape into a “Tujia rural theme park”. Apparently, something was missing in the transformation from intrinsic values to social, spiritual, educational, and other non-use values. The industrial guidance of government departments, residential enthusiasm for tourism development, and tourist behaviors blurred the cultural uniqueness of Xinjian Village as an agriculture-based ethnic village in a mountainous area. Without planning and tourism regulation, external forces (especially tourism markets) have dominated Xinjian Village growth. More seriously, villager values have changed as well. The tourism products constructed by local governments and provided by villagers, intended to satisfy a folk tourism psychology, directly changed the rural landscape, and real, local, and historical rural landscape information has been replaced by novelty-seeking and stylized ethnic custom information. These landscape changes are usually irreversible.

3.3. Hejiayan Village- endogenous development driven by eco-agriculture

Hejiayan Village is located in Huatian Township of middle Youyang County. The alpine villages of Chongqing near Youyang County are well known throughout southeastern Chongqing, mainly by virtue of their initial construction in the Tang and Song dynasties and formation (“Huatian Terrace”) in the Ming and Qing dynasties, as well as the century-old reputation of “Tribute Rice” produced there. With a history of more than 600 years, Hejiayan Village is well known for its natural landscape of fertile farmland surrounded by mountains, its residential landscape of small-scale clusters in three stockades (i.e., upper, middle, and lower), and its rice terrace landscape extending for miles along the contours. Currently the village has 557 residents with the surname He and 158 wooden dwellings in an area of three hectares. Terraces occupy a total area of 5 km², and an endocentric pattern based on terraces as central visual corridors has taken shape, with a strong sense of spatial depth. In general, the terraces have perfectly blended into the natural environment.

3.3.1. Staged characteristics of village transformational development. Thanks to the large diurnal temperature variation, long sunshine duration, and abundant natural rainfall and mountain surface water resources, Huatian Township produces excellent quality rice. In particular, “Tribute Rice” has attained a reputation. Prior to 2010, however, serious crop diseases and pests caused crop yields to decline. To guarantee rice yield, the farmers of Hejiayan extensively applied pesticides and fertilizers, which resulted in soil hardening that seriously jeopardized rice quality and affected rice sales. Many villagers abandoned their farmlands and chose to work in cities. To reverse the situation and guarantee the quality of rice produced in Huatian Township, Youyang County and Huatian Township initiated “Tribute Rice” in 2011: Based on “Tribute Rice” eco-agriculture, efforts were made to develop organic livestock production and rural tourism, and build a modern benefit-oriented agriculture base represented by “Tribute
Rice”, organic Sheldrake, and Hejiayan terrace tourism. The revitalization of the rice tradition has turned traditional rice production into an effective livelihood. Supported by institutional and technical innovations, traditional agricultural production resources have become the basis of village development and evolved into regional mountain eco-agriculture.

After 2013, the 13 villager groups of Hejiayan Village, the four villager groups of Shengji Village, and the five villager groups of Laolong Village jointly established an organic tribute rice production area of 800 hectares and constructed roads, canals, and other infrastructure within this area. Relying on cooperation with Southwest University concerning rice intercropping techniques and alpine terrace rice-duck intergrowth, organic ducks are reared in the core fields of the tribute rice base, and organic duck processors provide a service from rearing to sales that further increases villagers’ income. In terms of organized operation, Huatian Township assembled a “Tribute Rice” planting cooperative, brought the Huatian Rice Industry Co., Ltd., and acquired village rice products at the minimum price of 7 RMB/kg.

The terraced landscape of “Tribute Rice” is an important folk photography resource in China. Each year it attracts numerous photographers and tourists from all over the country to Hejiayan. To develop rural tourism to a terraced landscape and farming culture, Hejiayan has paved its main artery roads, constructed production roads, and built three agricultural sightseeing platforms, a 1 km agricultural sightseeing trail, and two ecological parking lots. In addition, it has also built 50 inn resorts and one tourist reception center. In 2015, Hejiayan was listed in the Chinese traditional village directory. Following that, the village provided style renovation for 100 dwellings, offered protective repair for some traditional dwellings, and improved its water networks and canals. In 2017, Hejiayan received 60,000 tourists and generated a total tourism income of greater than two million Yuan.”Three-type” village landscape changes. Natural habitat landscape: The “landscape and idyll” ecological pattern of Xinjian Village was basically stable. The vegetation covering the mountains on both sides was well maintained, and agriculture and forestry patches were still dominant factors in the landscape. Field roads, production roads, bridges, canals, and other corridor landscape components were also in sound condition. Current tourism trail construction had little interference in the overall natural environment, except that the urban landscape techniques adopted for the “Floral Valley”, climbing trail, and observation deck at the entrance of the tourism attraction were somewhat abrupt. The most obvious environmental interference was surface hardening for farmland infrastructure. In addition to the large-scale adoption of slate to harden field roads and bridges, cement was also used for canal hardening, which intensified the hardened surface influence on farmland ecosystems.

3.3.2. "Three-type" village landscape changes. Natural habitat landscape: Natural habitat landscape: Terraced rice culture has high natural habitat requirements and the long-term stability of four major ecological elements (i.e., forest, water system, terrace, and settlements) constitutes the basis of agricultural production. For this reason, the traditional natural habitat landscape of Hejiayan Village has been well conserved. The productive terraced landscape plays a dominant role. Production roads, field roads, bridges, and canals were reconditioned in partially paved manner to maintain the terraced landscape. Trails and sightseeing platforms were restricted and had no influence on forest landscape characteristics.

Residential landscape: The residential landscape of Hejiayan has changed drastically. The development of the village agricultural economy and tourism increased villager income, resulting in the continuous emergence of new dwellings. The phenomenon of “refurbishment” was very widespread. New dwellings were typically modern brick-concrete structures. To meet the demands of tourism, private houses and courtyards usually occupied large areas, causing increasingly serious traffic congestion. Local craftsmen have plastered the walls to produce wood textures, thus meeting the requirements of Tujia ethnic style. This has led to the emergence of many waterwheels, bulwarks, and other local symbolic elements. However, life in Hejiayan has modernized and urbanized, and the religious beliefs, customs, clothing, and food of the Tujia people are rarely seen in the village.

Economic production landscape: “Tribute Rice” is the dominant industry of Hejiayan Village, and the large-scale terrace landscape is the dominant economic production area. From water storage to rice
transplanting and grain drying, to straw harvesting, agricultural production activities carried out in terraces are a part of the local economic production landscape. Meanwhile, many activities related to agricultural production, such as festival activities and farming techniques, have become irregular yet important.

3.3.3. Value predicaments in traditional village conservation. The “agricultural revitalization promoting village development” path taken by Hejiayan that relies on “Tribute Rice” is both demonstrative and special. Hejiayan Village is endowed with unique landscape resources and a long-standing terrace cultivation history, which boosted its rapid rise out of poverty. The technical support of professional technical institutions (such as Southwest University and the Academy of Agricultural Sciences) and funding from the grass-roots government of Huatian Township also provided strong drives for its development. Villagers, as main producers who have truly benefited from development, were more motivated to participate in agricultural heritage conservation and tourism development. The transformation from the intrinsic heritage value to village use and social values was successful.

However, in terms of sustainable development, Hejiayan Village still faces some crises. First, there is the growing contradiction between people and land. With continuous population growth in recent years, village land has become increasingly limited and new rural dwellings are damaging the spatial pattern. To guarantee high-quality farmland resources, non-agricultural land conversion is strictly controlled. Thus, it is particularly important to coordinate further improvements to village quality and the traditional spatial characteristics.

Second, eco-agriculture requires better knowledge and techniques. Huatian Township has more than 5,000 people working in urban throughout the year, accounting for 45% of its aggregate labor force, and most of them are young adults. That is to say, those staying in the village usually lack knowledge and are incapable of receiving eco-agriculture-related technical training, which complicates effective cooperation.

Furthermore, most villagers of Hejiayan Village are Tujia. Tujia traditional dwelling symbols are often used to produce an ethnic minority village atmosphere. However, the most prominent cultural heritage characteristic of Hejiayan Village, as an agriculture-based traditional village, is not ethnic. In contrast, terraced agricultural production, tools, festivals, and folk customs more fully represent local cultural characteristics. The conservation and inheritance of these cultural landscape elements would more perfectly embody the intrinsic values of the rural landscape.

Finally, terrace maintenance requires strict ecological control. While Huatian Township has abundant water resources, terrace rice cultivation consumes a lot of water and requires flat land. The maintenance of organic rice fields also raises strict manure demands. Currently the supply of manure by pig and duck farmers is unstable so it is still impractical to completely ban the use of fertilizers. The rice-duck intergrowth technique employed in the current stage is environment-friendly and energy-saving, but it is inconvenient for large-scale farmland management. These problems can only be solved with further technical support.

4. Conclusions and Discussion
Based on traditional village transformational development, this paper selected two traditional villages from southeast Chongqing for empirical study, and reached the following conclusions:

(1) At the present stage, traditional village transformational development is inevitably driven by both internal and external forces, the activity and strength of which jointly determine the differences in development paths. There are always limitations to policy guidance, urban capital involvement, or spontaneous development under internal forces. Only endogenous endowments with exogenous drives (such as policies and capital) and local resources, cultural, and economic basis can overcome the predicaments in traditional village transformational development. For instance, Hejiayan Village combined its agricultural resources and industry landscape with exogenous conservation and eco-agriculture policies, al-
located production factors using external knowledge, techniques, policies, and funds, and joined historical landscape conservation with development of the primary industry. Only in this way can a village promote the sustainable development of its society, economy, and spaces.

(2) Traditional villages are a specific type of village, and the historical rural landscape is an important resource for their transformational development. Both macroscopic policies and capital involvement must be based on a full understanding of historical landscape values, along with awareness and evaluation of composition and characteristics of historical landscapes. For example, the transformational development of Xinjian Village was dominated by rural tourism, poverty alleviation, and other exogenous policy factors, but there was a lack of understanding about the true cultural traits of the village. The fact that the village landscape was purely used to serve tourism development demands resulted in a single industrial structure and the intensification of landscape vicissitude.

(3) As the comparison of the development processes of the two typical villages showed, the key to rural transformational development was in motivating endogenous forces through industry cultivation. In fact, industry cultivation-oriented economic reconstruction was the most active factor in rural development and played a leading role in both social reconstruction and landscape reconstruction. Therefore, in promoting traditional village transformational development, departmental and capital investments should attach great importance to the cultivation of endogenous forces, especially industry drivers. Taking landscape system conservation and rural tourism development as opportunities, efforts should be made to promote the development of traditional agricultural products and handicrafts, and introduce job training and ecosystem conservation into social group reconstruction, to enhance industrial revitalization, landscape conservation, and a rural spiritual core.

References
[1] Liu Yansui 2018 Research on the urban-rural integration and rural revitalization in the new era in China. Acta Geographica Sinica. 73(04) 637–650
[2] Long Hualou, Tu Suanguang 2018 Theoretical thinking of rural restructuring. Progress in Geography. 37(05) 581–590
[3] Li Bohua, Liu Peilin, Dou Yingdi, et al. 2017 Research progress on transformation development of traditional villages' human settlement in China. GEOGRAPHICAL RESEARCH 36(10) 1886–1900
[4] Yang Guiqing, Dai Tingxi, Wang Zhen, et al. 2016 Regeneration of Historical Cultural Village under the Perspective of Social Change. Urban Planning Forum 3 45–54
[5] Wen Jun, Wu Yuefei 2017 Villages with A Loss of Villagers: The Transformation of the Traditional Villages and Reflections on Rurality. SOCIOLOGICAL STUDIES. 32(04) 22–45+242–243
[6] Zhang Jinxiang, Jang Kefang 2016 Analyzing Capital Logic Behind Rural Construction Boom in Contemporary China. Modern Urban Research. 10 2–8
[7] Tang Jingyao, Zhang Jinghe, Hu Huan, et al 2016 Analysis on the spatial distribution characteristics of Chinese traditional villages. Progress in Geography. 35(07) 839–850
[8] Zhao Zhifeng, Wang Zhen, Yun Yan 2016 Research on the Development and Construction Mode of Traditional Villages Based on the Characteristics of the Village. JOURNAL OF HUMAN SETTLEMENTS IN WEST CHINA. 31(02) 11–14
[9] Yang Liguo, Liu Peilin, Lin lin 2015 The Effect of Traditional Village Landscape Genes in Construction Place Identity: Taking the Dong Minority Village as An Example SCIENTIA GEOGRAPHICA SINICA. 35 (05) 593–598
[10] Song Bin, Zhao qin, Wang Lili 2015 Study on the Integrated Conservation Method of Traditional Village Space in Urban Fringe Areas:Case Study of Lianhucun in Fuping County, Shannxi. Urban Development Studies. 22 (06) 118–124
[11] Lin Zurui, Chang Jang, Liu Jie, et al 2015 Integration and Reconstruction of Traditional Villages under the Influence of Tourism Development: A Case Study of a Traditional Village of Yingtan in Xingtai, Hebei. Modern Urban Research. 6 32–38
[12] Liu Xiapei, Gao wei 2016 Institutional Empowerment: Community Participation in the Conservation of Traditional Village Cultural Landscape of Guangdong Kaiping Watchtower. 32 (01) 121–124

[13] Zhang Song 2017 A Study of Traditional Villages as a Form of Human Settlement and Their Integrate Conservation. Urban Planning Forum. 2 44–49

[14] Ye Lu, Huang Yiru 2016 The Design Intervention of Contemporary Rural Construction from the Perspective of Capital Motivation. NEW ARCHITECTURE. 4 7–10

[15] Gao J, Wu B 2017 Revitalizing traditional villages through rural tourism: A case study of Yuanjia Village, Shaanxi Province, China. Tourism Management. 63 223–233