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Deciphering How Promoting Flower-Viewing Economy for Construction of Harmonious-Villages in Mountainous and Hilly Areas

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ABSTRACT: Sustainable development in mountainous and hilly regions is a critical component of global sustainability efforts. These regions are facing numerous challenges, including ecological fragility, labor migration, and resource scarcity and imbalance. Addressing these issues is imperative for sustainable development; this study identifies two primary conditions necessary for sustainable development in mountainous regions: achieving human and nature's sustainable development, which provides reliable material support and social support for achieving the same in the mountainous and hilly regions. The flower-viewing economy, derived from transforming China's mountain agriculture, is an efficient new format for mountainous and hilly regions. To verify these primary conditions, this study constructed a flower-viewing economy from three dimensions: material support, subject relationship, and expectation, using the peach blossom festival in Tingzi Village, Taihe Town of Chongqing City, as an example. Here, we explained that a sustainable development model focused on benefiting farmers is an endogenous, farmer-centered pathway to sustainable development, highly relevant to promoting sustainable development in developing countries' mountain villages.

Keywords: Sustainable development; Mountainous village; Flower-viewing economy; Smallholder family production



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1. Introduction

Achieving the Sustainable Development Goals (SDGs) of “no poverty and zero hunger” is challenging in the mountainous regions. The sustainable development of mountainous regions is crucial to global rural development. According to the Food and Agriculture Organization of the United Nations (FAO), 90% of the world's mountain dwellers live in developing countries, and about one-third of the poor live in mountainous regions [1]. The 76th United Nations General Assembly declared 2022 the International Year of Sustainable Development in Mountain Regions to address mountain regions' development dilemma and contribute to developing countries' sustainable development. Yet, the mountainous regions still face sustainable development challenges globally. For example, as the mountains' role in biodiversity refuges is threatened by the continued global climate and land-use change, globalization and commercialization of agricultural production trends are oppressing and excluding smallholder family production in mountainous regions [2]. These arise from geographical remoteness (transportation) constraints, relatively poor social economy development, insufficient policy support, *etc.* Nevertheless, mountainous regions are crucial ecological systems, with highly variable, complex, and fragile natural environments and spatial heterogeneity in socio-cultural and economic development. Therefore, to eradicate absolute poverty and hunger in the mountain villages, raising awareness of the importance of sustainable development, conservation, and sustainable use of mountain ecosystems in the region is essential.

As the world's largest developing country, about 70% of China's land area is mountainous [3]. Due to the constraints of the natural environment, transportation, and other factors, mountainous regions are the "hard bones" difficult to gnaw in eradicating poverty. In 2015, China formally launched the Poverty Eradication Campaign. By 2020, the nation had eliminated all absolute poverty, eradicating poverty in 832 poverty-stricken counties. It also achieved the poverty reduction goals of the United Nations 2030 Agenda for Sustainable Development 10 years ahead of schedule, contributing to >70% of the world's poverty reduction. During this period, China put forward several policies, such as Rural Revitalization [4,5], Rural Human Settlement Environment renovation [6–8], Separation of Three Rights in Homestead [9], entry of collective-owned commercial construction land into the market, unified proper registration of natural resources, *etc.* These policies aimed to establish leading industries in the countryside, improve infrastructure and public services, and enhance the quality of the human environment to revive many dormant assets in the countryside, promoting sustainable development therein. However, the weak industrial base in mountainous regions hinders their development in consolidating poverty reduction gains and effectively linking them to rural revitalization. Factors such as limited agricultural mechanization, inadequate rural production roads, low land use, and labor loss have hindered the development of traditional mountain agriculture into large-scale and modern agriculture [10]. Therefore, balancing industrial development and environmental protection is vital to sustainable development in mountainous regions.

Guided by China's advocacy of building a robust ecological barrier on the upper reaches of the Yangtze River, including major strategies (such as rural revitalization and the construction of livable, workable, and beautiful villages), mountain villages do organize local farmers through village committees to jointly operate mountain fruit industries to overcome the disadvantages of fragmented management by smallholders. At the same time, they have expanded the brand influence by organizing flower-viewing festivals during the flowering season, thus forming a flower-viewing economy, a fusion of traditional mountain forestry and the fruit industry and the rural tourism industry. The flower-viewing economy relies neither on social capital nor on introducing exotic species but on conventional crops. They are carried out annually during the flowering season, with the main radiating population concentrated in the neighboring towns, districts, and counties. Compared with traditional rural tourism, the flower-viewing economy has a shorter period for enjoying the flowers and significantly economizing the resources due to the long off-season, making it more sustainable.

Through crop conversion, agriculture, and tourism integration, the flower-viewing economy optimizes using sloping farmland resources in mountainous regions [11]. It overcomes the abandonment (by the marginalization) of mountain agricultural landscapes, avoiding the developmental problem of landscape loss due to rural space occupation by social capital and helping to solve the current dilemma of sustainable development in mountainous regions. However, the advantages of the flower-viewing economy over other industries in contributing to the sustainable development of mountainous regions still require further study to balance the relationship between ecological protection and economic development. It also delves into activating the endogenous development power of villages.

The primary objective of this study is to elucidate the internal logic of sustainable development in mountainous regions via the flower-viewing economy, focusing on aspects of material support and interpersonal relationships. The hypothesis posited by this study is that sustainable development trajectory of the 'people-land-industry' nexus in mountainous and hilly villages must ensure the sustainability of both the human-nature relationship and the human-human relationship. This study condensed the theoretical framework through related research in Section 2, introduced the research case, methods, and data collection in Section 3, applied the theoretical framework to the empirical evidence of the study case in Section 4, and focused on the contribution of the research case in promoting the sustainable development in mountainous regions in Section 5. Consequently, this research shows how the flower-viewing economy has developed the mountainous regions in China, providing a global sustainable development template for countries to explore.

2. General Thought

2.1. Literature Review

At the end of the 20th century and the beginning of the 21st century, some mountainous regions in Southeast Asia cultivated sloping land and shortened the fallow period to increase agricultural productivity to meet the demand for regional food production. In the process, several problems ensued (such as declining agricultural productivity, loss of biodiversity, and water pollution), damaging the fragile ecological environment of the mountainous regions [12]. The highly fragile ecology, coupled with irrational land development and use, severely reduced the sustainable development capacity of the mountainous regions. In addition, the shrinking agricultural labor force and problematic agricultural mechanization led to abandoning mountainous agricultural landscapes, wasting mountainous land resources, causing inadequate labor, and retarding mountainous regions' development [13].

New crops have been introduced to adapt to mountain farming conditions and promote farming systems diversification to strengthen their sustainability [14]. Some studies have shown that using agroforestry systems can enhance agricultural biodiversity conservation, create more diversified sources of livelihood, and be essential to supporting the sustainable livelihoods of smallholder farmers in mountainous regions [15]. However, due to globalization and commodification, regional agricultural land grabbing has consolidated numerous ownerships of lands and agribusiness companies. In turn, it has developed large-scale and modern agriculture while depriving farmers of developmental rights. Therefore, balancing the industrial development of mountainous villages and the fragile ecological environment, changing the path of rural industrial growth according to local conditions [16], and exploring new business opportunities can be achieved.

China's countryside is dominated by traditional agricultural practices (such as smallholder and family economies formed under the Household Responsibility System), declining under fragmentation constraints of mountainous cropland and low agrarian production efficiency [17]. In transforming the population's dietary structure, the demand for grain gradually decreases while that for fruits and vegetables increases [18]. Converting rural crops according to local conditions and using regional resource endowment to select suitable crops is essential to promoting sustainable development in villages, which enhances ecological sustainability and farmers' income [19]. At the same time, enabling the integrated development of agriculture and tertiary industry has significantly improved the quality of the rural environment and economic growth.

At the beginning of the 21st century, China set out to achieve sustainable development through ecological farming that involves rice-fish farming, rice-shrimp symbiosis, and other modes. Although these modes for farmers' technology and land leveling requirements are still high, most farmers experience declining yields, low-added value of agricultural products, and other problems. It is challenging to satisfy the numerous farmers pursuing economic value. Accompanied by the rural tourism boom in recent years, social capital shaped the rural space briefly to improve rural infrastructure and public service facilities, thereby creating rural tourism brands, such as establishing farmhouses for the urban residents and changing the face of the countryside. Still, problems such as short duration, deprivation of farmers' resources, and the economic income from land transfer alone make it problematic for farmers to sustain their lives [20]. Exploring new business models shows that the sustainable development [21] of mountain villages must meet two primary conditions: first, finding a balance between environmental protection and economic income for mountain farmers; second, strengthening the ability of mountain villages to retain farmers and attract talent. Both the relationship between humanity and nature and that among humanity should be considered.

2.2. Theoretical Framework of the Flower-Viewing Economy toward Promoting the Sustainable Development of Mountainous Villages

Sustainable development is holistic, endogenous, and integrated, consisting of external and internal responses. The external response deals with the relationship between humanity and nature, providing concrete support for sustainable development, whereas the internal response deals with societal relationships, providing soft support toward sustainable development [22]. Therefore, the sustainable development of mountain villages must be interpreted from these two responses. In the external response, nature becomes the material support for rural development, and balancing the relationship between humans and nature is the material support for the sustainable development of mountain villages. In the internal response, the rural subject is the endogenous driving force for rural development, and balancing the relationship among humans is the social support in this regard (Figure 1).

2.2.1. Material Support: The Relationship between Humanity and Nature

Nature provides the essential environment for human production, development, and survival, including spatial environment, climatic environment, water environment, biological environment, *etc.*, giving the required material and energy. At the same time, human survival and development are inevitably influenced by the limitations of the natural environment. The product of human adaptation and transformation of the natural environment (spatial representation) is a vital medium to indirectly understand the relationship between man and nature. Also, as the embodiment of the relationship between humanity and nature, it is the main body of the countryside within the physical space of the countryside, shaping and reshaping the role of forming a material space and uniting immaterial space [23].

Spatial representation refers to the conceptual and symbolic ideological space that a specific social practice space unites. The spatial practice can reflect the material characteristics of the space, while the spatial representation responds to the cosmic dimension of the space. Spatial representation comprehensively manifests the superimposition and mutual

influence of material and human behavioral spaces. The rural multiple subjects and rural space have an interactive relationship mediated by the practical activities of the numerous subjects. On the one hand, the various subjects have changed the appearance of rural space through their practical activities. On the other hand, the appearance of rural space constrains the practical activities of the multiple subjects. The practical activities of the rural multiple subjects have shaped the rural spatial representation, and the multiple subjects are the main force for transforming the rural space [24]. In the flower-viewing economy, the rural subjects abandon the traditional over-exploitation and utilization of mountainous land in the early days, select suitable cash crops according to local conditions, adapt to nature, and moderately transform nature toward balanced development between humans and nature, thus forming a series of spatial representations.

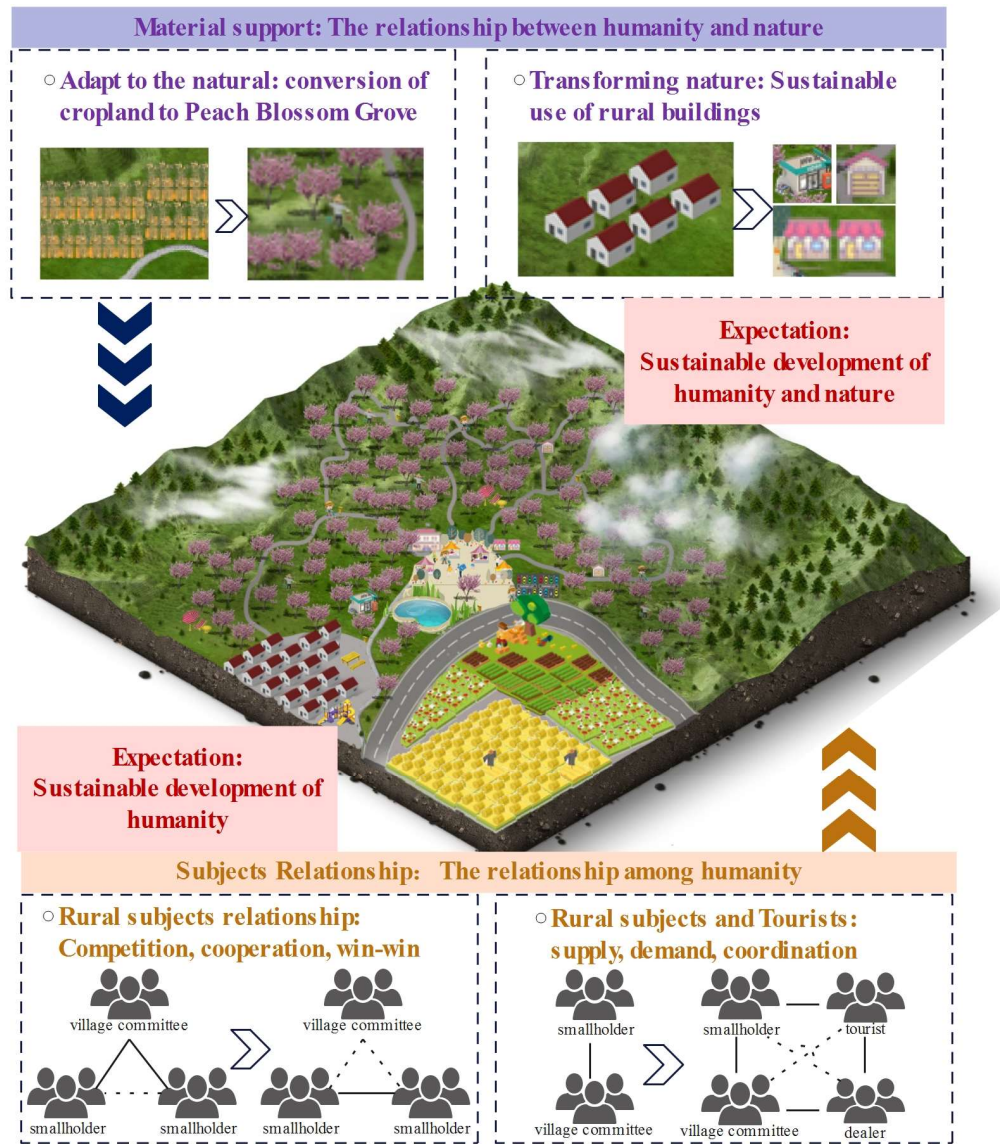


Figure 1. The theoretical framework of flower-viewing economy promoting the sustainable development of mountainous villages. Source: Authors’ drawings.

2.2.2. Subject Relationship: The Relationship among Humanity

Sustainable development is a new stage in human civilization. It is comprehensive, including many aspects, such as society, economy, environment, and resource development [21]. One of the core elements embodied in it is the degree of order, the level of organization, rational cognition, and the ability to promote a productive and efficient society. Establishing a harmonious society is driven by managing various relationships among people. Such relationships include those between subjects of interest, various classes of people with different incomes, present and future generations, regions, and even the globe. An inharmonious and unstable society loses the existential basis of sustainable development. The relationship between rural subjects is the internal response to the sustainable development of mountainous villages. The complexity and stability of their relationship network is one of the criteria for judging the

dynamics of endogenous development in mountainous regions. Most of China's mountainous regions still maintain traditional agricultural business models, such as smallholder and family economies, characterized by closure, dispersion, conservatism, *etc.* Building an internal production network in the countryside enables aggregation benefits and is the first step in activating sustainable regional development. To an extent, social relationships are affected by geography. However, with the advent of mobile phone networks and other communication tools, the influence of distance on social relationships has been reducing. Therefore, the network has become a crucial platform for social interaction.

In the flower-viewing economy, the production and consumption network formed by the interaction of multiple subjects in the countryside and between rural and non-rural subjects benefits the rural subjects. When the economic and cosmic gains of the subject relationship network can exceed the rural subjects' labor harvest outside the countryside, the rural subjects would be more likely to return to the countryside. Suppose this subject relationship network can bring more economic and cosmic benefits than outside jobs. Then, the rural subjects would probably return to the countryside and contribute to developing their villages.

2.2.3. Expectation: Harmony between Humanity and Nature

Sustainable development in mountain villages is a long-term, sustainable, and balanced development model that aims to promote the coordinated development of the economy, society, and the environment, utilizing existing endowments to improve residents' quality of life [25]. Sustainable development in mountain villages needs to coordinate two primary relationships. First, the relationship between humanity and nature is the material support for sustainable development. In actively participating in ecological construction and protection, it optimally uses the advantages of local resources, strengthens the structural adjustment and transformation of rural industries, improves traditional agricultural production methods, cultivates and develops new agricultural and ecological sectors, and develops self-sustaining mountainous rural industries. Secondly, coordinating the relationship among humans (especially between rural subjects and between rural and non-rural subjects) is the social support toward sustainable development. The more developed the commodity production, the higher the degree of socialization, the more interdependent the people, and the deeper and more frequent the interactions between them. In turn, it will encourage the exchange of information, resources, money, and other things between them.

Excellent political service and management strengthen farmers' participation through democratic means, independently guiding residents to develop while promoting the two-way flow of urban and rural factors. It aids industrial development and talent building in mountainous villages. Sustainable mountainous villages must consider all aspects of ecological protection, human habitat, industrial development, human relations, a harmonious coexistence of man and nature, a prosperous development of rural industries, and improved socialization levels, thus constructing livable and beautiful villages.

3. Research Case and Methods

3.1. Case Selection and Introduction

At the end of the 20th century and the beginning of the 21st century, some mountainous regions in Southeast Asia cultivated sloping land and shortened the fallow period to increase agricultural productivity to meet the demand for regional food production. In the process, several problems ensued (such as declining agricultural productivity, loss of biodiversity, and water pollution), damaging the fragile ecological environment of the mountainous regions [12]. The highly fragile ecology, coupled with irrational land development and use, severely reduced the sustainable development capacity of the mountainous regions. In addition, the shrinking agricultural labor force and problematic agricultural mechanization led to abandoning mountainous agricultural landscapes, wasting mountainous land resources, causing inadequate labor, and retarding mountainous regions' development [13].

Tingzi Village, located in Taihe Town of Chongqing City, is listed in China's 10th batch of "one village, one product" demonstration villages and towns (Figure 2). The leading industry of Taihe yellow peach is one of the national geographical indications in China, a typical representative of the transformation of traditional mountain agriculture. In December 2019, the Taihe yellow peach was included in the national list of famous, unique, excellent, and new agricultural products. On 30 April 2020, Taihe's yellow peach was declared a geographical indication of agricultural products. Later, on 22 December 2021, it was included in The Catalogue of Chinese Specialty Agricultural Products. Annually, in mid-March, Tingzi Village in Taihe Town holds a 10-15-day peach blossom festival to promote Taihe Yellow Peach. It is a seasonal product that results from the integration of mountain development with agriculture and tourism. In the early stage of developing the flower-viewing economy, the government acted as a leader and promoter.

However, as the income increased later, the fruit farmers became the main promoters. In this process, the strength of government funding and social capital support weakened gradually, and the endogenous development of the countryside was strengthened. Compared with traditional cultivation, the flower-viewing economy is better adapted to the natural geographical environment and fragile ecosystems in mountainous regions, reflecting its adaptation to nature and ecological protection. Also, compared with the traditional mountain fruit industry, the flower-viewing economy has a larger publicity platform and more sales channels, capable of enriching the fruit farmers.

We chose the peach blossom festival in Taihe Town as a research case for this study for four major reasons. First, the festival has a long history. As of 2023, 16 peach blossom festivals have been organized, bringing about 100,000–200,000 RMB income to fruit farmers annually during the flowering period. It is a typical example of the flower-viewing economy derived from the transformation of traditional mountain agriculture in China’s mountainous regions. Secondly, Tingzi Village has agriculture as its historic primary industry, adopting the development mode of “village community + cooperative + fruit farmers” and the development strategy of “Agriculture + E-commerce + Tourism”. In mid-March yearly, the Peach Blossom Festival Tourist Card Route is launched, creating the “Agricultural Products + Food + Cultural Creation” Square Bazaar to experience the peach blossoms, browse the bazaar, explore the food, and watch the program. These have remarkable effects on increasing entrepreneurship and income.

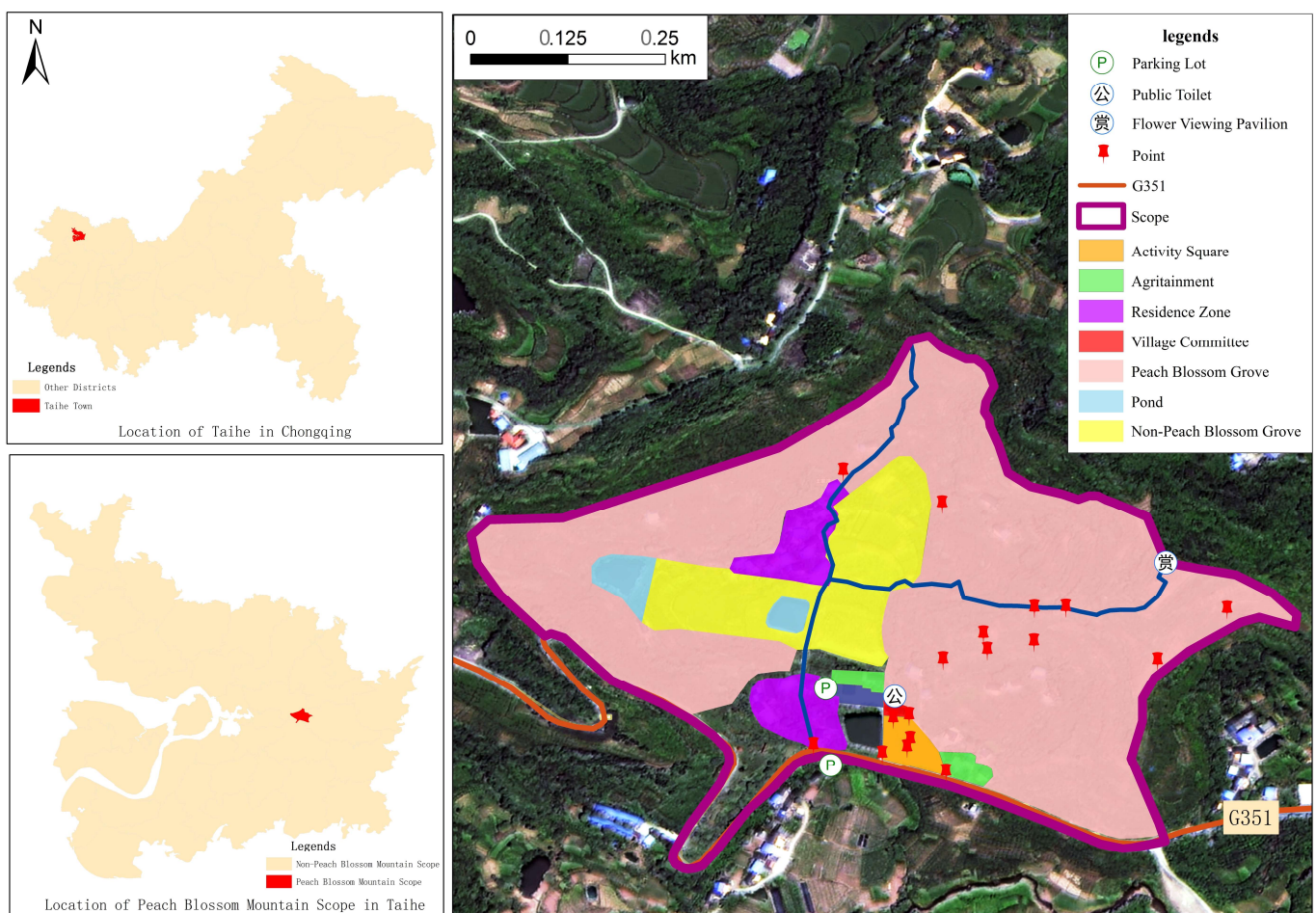


Figure 2. Location of Taihe Peach Flower Festival. Source: Authors’ drawing.

3.2. Research Methods and Data Collection

Our research data originated from semi-structured interviews and field observations. To enhance the data’s authenticity and objectivity, the research team followed relevant news media reports for ten consecutive days and conducted three rounds of field research to collect interview data in the Peach Blossom Festival’s early, middle, and late stages. The first field research was conducted on Friday, 10 March 2023, marking the early stage of the festival. Field visits were done, and five tourists and five farmers were randomly interviewed for 15–30 min. The second field study was conducted on Wednesday, 15 March 2023, representing the middle of the festival. Two village cadres, five traders,

seven tourists, and seven farmers were interviewed for 15–30 min. The third field study took place on Sunday, 18 March 2023, signaling the end of the festival. One trader, three farmers, and seven tourists were interviewed for 15–60 min.

4. Taihe Peach Flower Festival Sustainable Development

To verify the scientific issues raised in the previous section, we constructed a theoretical framework to analyze the logic behind the peach blossom festival in Taihe Township toward promoting sustainable development in Tingzi Village. On the one hand, the external response of the Peach Blossom Festival in promoting sustainable development was interpreted through the spatial representations generated by the relationship between humans and nature. On the other hand, the internal response of the festival in promoting sustainable development in Tingzi Village was interpreted through the subjective relationship.

4.1. Material Support: Adapt to the Natural, Transforming Nature

The spatial representation results from the subject's behavior in shaping rural space. Different spatial representations can highlight the preferences of various subjects, reflecting the differences in the subject's willingness to transform the space. In the flower-viewing economy, the rural subjects transformed the sloping farmland into peach orchards to adapt to nature, balancing the conflict between ecological protection and industrial development. Here, the rural subjects recycled the limited rural buildings into activity squares and farmhouses to satisfy foreign subjects' needs for rural space.

4.1.1. Adapt to Nature: Converting Cropland to Peach Blossom Grove

The peach blossom forest in Tingzi Village is a typical product of the harmonious coexistence between humanity and nature. It has a low degree of people's role in nature, reflecting sustainable development. No rural industrial foundation exists in Tingzi Village, which is dominated by traditional smallholder agriculture. Also, the steep topography and geomorphology hinder cultivating arable land mechanically and on a large scale. Many young and middle-aged workers migrate from the village, leaving a relatively old population, with the village's public services and infrastructure merely meeting the farmers' needs. Compared with flat villages in economically developed areas, fragmented arable land restricts agricultural mechanization to reduce labor demand. At the same time, the transport conditions limit the development of rural industry and capital to the countryside, hindering Tingzi Village's transformation from traditional agriculture to large-scale and modern agriculture.

In the agricultural tradition of Chinese mountainous regions, hillside farming is exceptional. Slope farmland refers to the distribution of poor soil on the slopes; it generally refers to the land slope of 6°–25° between the farmland types. It is often called steep slope farmland, suitable for grass and shrubs but not for large-scale farming. And the larger the proportion of plow, the more severe the erosion and the poorer the ecological environment. A sloping arable land with a slope greater than 8° is unsuitable for growing food because substantial human alteration of topographic and geomorphological conditions would more likely aggravate soil erosion and natural disasters, such as rocky desertification. Slopes over 15° can only be used for afforestation to solve ecological problems. With the increasingly rich dietary structure of the population, the demand for vegetable and fruit food has risen, and the benefits of planting vegetables, fruits, and other cash crops are higher than planting food crops. Sloping farmland is expected to achieve the dual goals of rural industrial development and ecological protection by transforming it into orchards and other means.

Taihe Township has gone through 40 years, from introducing yellow peaches on a large scale to successfully declaring geographical indications for agricultural products by including Taihe Yellow Peach in the National Catalogue of Special Quality Agricultural Products. Tingzi Village has a history of planting peach trees for over ten years (Figure 3). By planting peach trees, the sloping arable land has been transformed into fruit forests, improving the utilization efficiency of the sloping arable land.

“There are reasons why Taihe Yellow Peaches are delicious and widely known. First, we select old varieties with good taste and a long growth cycle. Secondly, there is plenty of light and strong photosynthesis.”

——Old Secretary Peng of Tingzi Village

“Tingzi Village has been preparing for the Peach Blossom Festival for more than ten years, and the festival attracts tens of thousands of visitors yearly, bringing an annual income of two to three hundred thousand to the village, making the yellow peach the largest pillar industry in Tingzi Village. No land is leased to foreign companies in the village; farmers own their land and plants. However, some farmers in the village transfer

other farmers' unused land to expand the planting area. The village's yellow peach industry has also attracted many young people to return home and start their businesses.”

——Chief of Tingzi Village

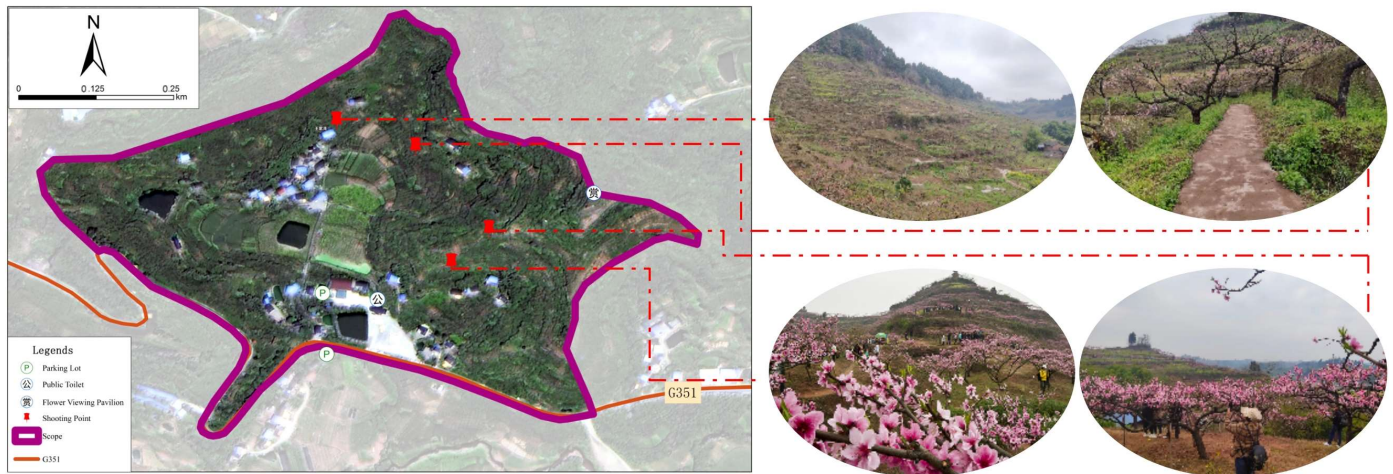


Figure 3. Spatial representations of peach blossom forest in Tingzi village. Source: Authors' drawing.

4.1.2. Transforming Nature: Sustainable Use of Rural Buildings

Sustainable development involves transforming nature based on respect for and adaptation to it. Also, the material products of the artificial transformation of nature must serve human production and life. Recycling and mixing synthetic products to improve their efficiency is crucial to sustainable development. In Tingzi Village, facilities (such as the activity square and farmhouses) are the material products formed by the main body of the village to act on the natural environment, serving Tingzi's farmers daily (Figure 4). The activity square is a product of the will of the village collective, farmers, vendors, and tourists. The village collective needs a venue for the opening ceremony of the Peach Blossom Festival to attract tourists. As for the farmers and vendors, a space is required to sell agricultural and other products to achieve the agglomeration effect. Similarly, tourists need a specific commercial space to purchase rural agrarian products. Thus, the village collective led the building of the activity square during the Peach Blossom Festival, serving as a focused platform and carrier for farmers, traders, and tourists during the interaction. Also, to further enhance the efficiency of its sustainable use, it is equipped with recreational facilities used during the non-peach blossom festival to meet the needs of farmers for public space and recreational space. It also serves the needs of the village collective in executing specific collective activities.

Farmers established two farmhouses to meet visitors' meal needs during the Peach Blossom Festival. One of them is a converted farmhouse, and the operators are primarily the owners of the farmhouse, his family, and friends, running the business together. The other one is a farmer in Pavilion Village who leases an unused house in the village for agro-entertainment, and the lease period is only when preparing for the Peach Blossom Festival.

“The operation of the farmhouse depends highly on the weather. When the weather is partly sunny, thousands of tourists visit daily, increasing the daily income to more than 10,000 yuan. But when it rains, there are fewer tourists and less income. Annually, the Peach Blossom Festival is open for 10–15 days. On average, we can earn thousands of yuan per day.”

——Farmhouse owner



Figure 4. Spatial Representations in Tingzi village. Source: Authors' drawing.

4.2. Subject Relationship: Rural Subjects' Relationship; Rural Subjects and Tourists

Multiple subjects strengthen the sustainable development of a region, and the relationship between these subjects provides mild, soft support [26]. Tingzi Village in Taihe Township attracts many people within a short period during the Peach Blossom Festival. Aside from the village subjects (village collectives and farmers), non-village subjects, such as tourists and traders, are also attracted.

By interviewing four types of subjects—village collectives, farmers, tourists, and traders—the researchers observed that different groups played various roles in the Peach Blossom Festival. Village collectives and village cadres were the leading promoters and organizers of the festival. Farmers were essential festival subjects, serving as maintainers, providers, and beneficiaries. On the other hand, tourists were one of the crucial subjects of the festival, acting as the main experiencers and consumers of the countryside culture and produce, respectively. Also, the vendors were the participants from the Taihe township. The practical activities of multiple subjects played a ripple effect similar to dominoes, becoming the main force in promoting the sustainable development of the countryside [27]. Here, the relationship between multiple subjects was the bridge connecting their activities, of which the relationships between farmers and those between farmers and tourists were paramount.

4.2.1. Adapt to Nature: Converting Cropland to Peach Blossom Grove

Competition promotes progress, and cooperation leads to a win-win situation. Tingzi Village, Taihe Township, adopts the “Cooperative + Farmers” development mode to unite the isolated yellow peach farmers to expand the village’s industrial scale and create the village’s yellow peach brand. By establishing the agricultural cooperative under the leadership of the village collective, the yellow peach growers in Tingzi Village exited the vicious cycle of low-price competition through a single sales channel of self-growing and self-selling (Figure 5). The interviews revealed that farmers generated economic income through three main channels. First is selling agricultural products, such as gherkins, peach gum, and yellow peaches. Their respective prices are 10 yuan, 20–50 yuan (depending on quality), and 10–20 yuan. These sales can provide farmers with hundreds or even thousands of yuan in daily income. The second channel is operating a farmhouse. The Tingzi village has two farmhouses: one is run by a local farmer who temporarily rents it out at 1000 yuan per 10 days. At the per capita consumption of 50 yuan, the peak period can be three to four hundred people daily. There can be three or four hundred people daily in the peak period and dozens of people daily in the low period. On average, the entire Peach Festival involves hundreds of people a day. The third channel provides temporary work opportunities. In addition, farmers use the front courtyard of their houses as a temporary car park, charging a parking fee of ten yuan per car, earning about three to four hundred yuan per day during the peak season. Moreover, during the Peach Blossom Festival, a dozen temporary cleaners are hired at RMB 70 per person daily.

The farmers would introduce customers to each other, promoting the exchange of resources through strong cooperation and weak competition. As a result, farmer-to-farmer interaction gradually becomes more frequent. Based on the leadership of the agricultural cooperative and the construction of the e-commerce platform, the relationship

between farmers gradually improved from the early self-growing and self-selling strong competition and weak cooperation to weak competition and strong cooperation. The festival and the traffic of shopping platforms (such as Jitterbug and Taobao) help build an e-commerce platform that expands the sales of yellow peaches in the village, ridding it of the low-sales problem arising from a single channel of self-sale by farmers.

“The Tingzi village has a high proportion of elderly people that rarely go out to work. So they can only hold on to their fields. But profits from traditional agricultural production are meager, and earning thousands of dollars a month is difficult. The peach blossom festival, organized by the village collectives, allows us to expand our peach sales, and we can also come every day to clean and manage the peach blossom forests, earning about seventy yuan in extra income.”

——Peachtree farmer and temporary cleaner (Grandpa Lee)

“Every household in the village grows peach trees of different sizes. Some farmers have planted four or five hundred peach trees at home, while others have only planted a few dozen. When some farmers do not have enough yellow peaches to sell, they buy from other farmers’ homes to sell, and we all help each other to improve the sales of yellow peaches together.”

——A yellow peach farmer (Mr. Lee)

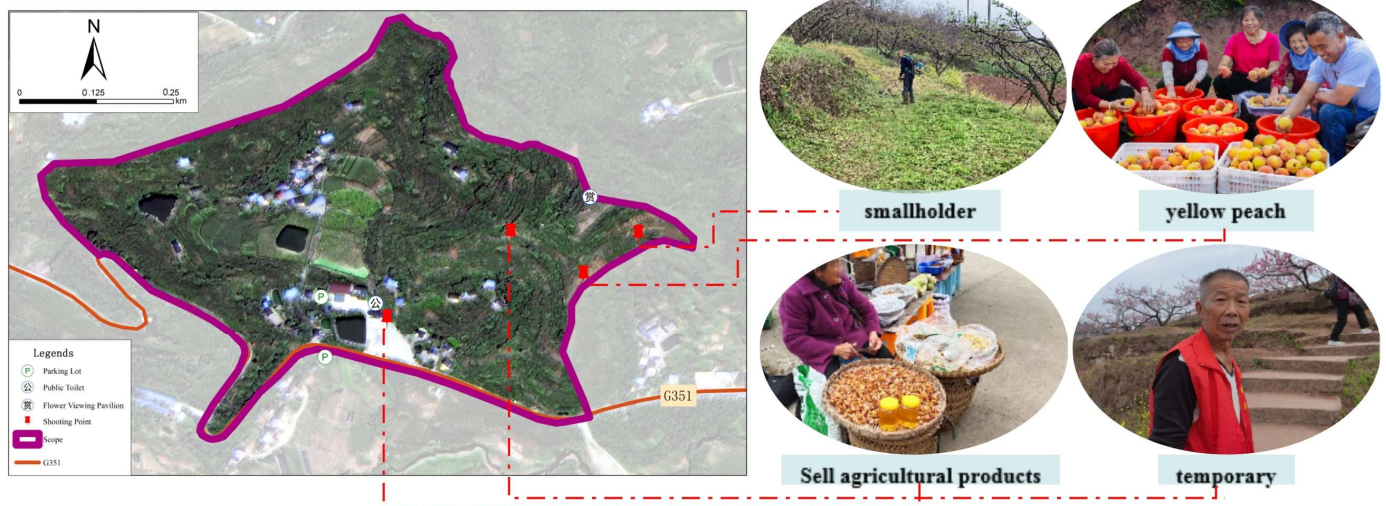


Figure 5. Rural Subjects in Tingzi village. Source: Authors’ drawing.

4.2.2. Rural Subjects and Tourists: Supply, Demand, and Coordination

Visitors of the Peach Blossom Festival fall into two main categories. First, there are tourists whose primary purpose is to enjoy the blossoms for relaxation. They mainly come from Chongqing localities. Visitors from nearby villages barely buy agricultural products (such as dried peaches and peach gelatin), unlike those from towns and urban areas, who are often eager to buy the produce, including Taihe yellow peaches. The second category constitutes tourists whose primary purpose is media coverage (*i.e.*, video recording, photography, and journaling). Their willingness to consume the farm produce is less than that of the first category. However, from another perspective, this group shoots videos and photos for online broadcasts, promoting publicity that attracts more tourists from other counties outside the Hechuan District. As a result, their activities promote the sale of agricultural products.

“Every March, spring brings family and friends together on this tour to enjoy the peach blossom. Every year, we also buy Taihe Yellow Peach for friends, superiors, *etc.* Taihe Yellow Peach is a local agricultural specialty of Hechuan and one of the must-have products for gift-giving.”

——Tourist from Hechuan District (Mr. Wu)

Whether it is the first group of tourists or the second, they aspire to experience rural nature, and farmers are the main implementers to meet their needs. At the same time, tourists expand the sales of peach products for farmers. Traditional peach product sales mainly rely on the farmers’ selling ability through regular customer promotion. Since the Peach Blossom Festival is held in Tingzi Village, it attracts tens of thousands of tourists annually, primarily from the capital city of Chongqing, thus becoming potential customers for subsequent peach sales.

Although Taihe Yellow Peach is popular, short-term tourists often become long-term customers, expanding the sales channels for subsequent marketing. During the festival, the relationship between farmers and tourists deepens, and the yellow peach industry chain in Tingzi Village is extended by coordinating the supply relationship between the groups. Although the festival was initially held to expand the sales channels of yellow peaches in Taihe, after more than ten years, it has started attracting many from nearby counties to experience the flowering season, thereby improving the subsequent sales of peaches (Figure 6).

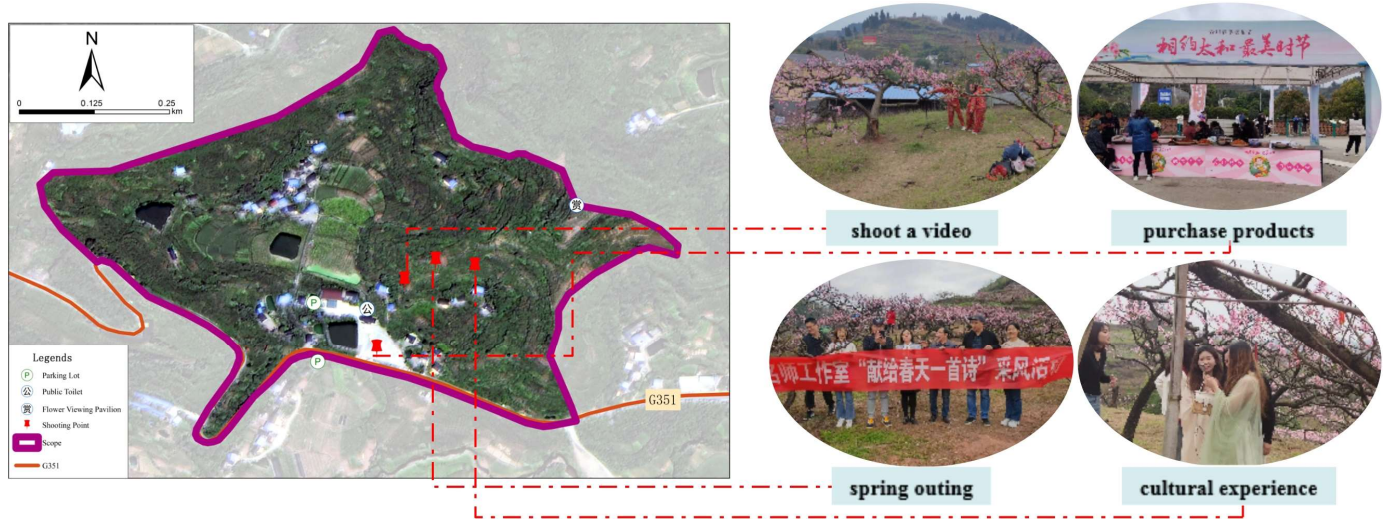


Figure 6. Tourists in Tingzi village. Source: Authors’ drawing.

4.3. Expectation: Man and Nature Coexist in Harmony

Peach Blossom Festival in Tingzi Village is a new industry formed under several policies, such as China’s “One Village, One Product”, industrial revitalization, *etc.*, providing a realistic and natural carrier for sustainable development in mountain villages. Tingzi Village has contributed to revitalizing ecological resources, nourishing water, preventing excessive wind and soil erosion, and restoring biodiversity by transforming sloping farmland with relatively low food production into peach forests. Recycling of village buildings revitalizes idle resources and promotes the efficient use of artificial products to meet the various needs of the village’s development.

Held annually in March, the Peach Blossom Festival generates additional economic income of approximately RMB 2,000 or more for participating farmers, exceeding the financial income from traditional plantation agriculture. It also lays the foundation for harvesting and selling yellow peaches during the ripening period from mid-July to mid-August, further promoting the development of the yellow peach industry in the village. By holding the peach blossom festival, Tingzi Village has facilitated the production networks in the village, and the relationship between farmers has gradually changed from strong competition and weak cooperation to weak competition and strong cooperation, bringing more economic benefits to farmers. Building urban and rural elements flow platforms has attracted many tourists to Tingzi Village, boosting the town population, capital, and other elements while exporting the Taihe Yellow Peach brand. Consequently, the two aspects: “man and nature” and “man and man,” have laid a solid foundation for sustainable development in the Tingzi Village.

5. Discussion

This study reveals a special mode of sustainable development of rural industry in mountainous and hilly areas under the background of southwest China and explains how this mode can realize the sustainable development of “human-land-industry” in mountainous and rural areas through investigation and interview. The flower-viewing economy is an endogenous circular development path of “government support-village collective organization-farmers’ operation-social participation” derived from the transformation of traditional mountain agriculture in China’s mountainous regions. It constitutes a new type of “agriculture + tourism + e-commerce” economy. Also, it overcomes ecological protection and industrial development problems while developing the Chinese mountain villages. Also, the village’s experience in traditional peach tree cultivation and designing production networks has built a platform for the urban and rural factors, significantly overcoming the problems of idle and wasted rural resources and the loss of several workers.

Compared with the existing research, this study focuses on a new approach to cultivating new rural industries, consolidating the results of poverty alleviation in mountainous villages. It encourages rural revitalization, selecting the flower-viewing economy as a unique new industry, analyzing the logic of sustainable development of man and nature, man and man, and prioritizing endogenous development dynamics of the village. The natural environment is only the material foundation of rural development, supported by the residents. To achieve sustainable development, fragile ecological environment and weak industrial base problems in mountainous regions must first be resolved. Secondly, the excessive migration of youths and young residents from mountain villages must be curbed. Therefore, the key to rural revitalization is to absorb rural labor and talents by cultivating new rural enterprises.

However, this study has its shortcomings. Due to the article length limit, it cannot clarify the formation of the flower-viewing economy with abundant analysis. Hence, the research team will later explore the flower-viewing economy as a new rural business through in-depth research.

This study provides essential practical experience and theoretical support at this particular stage of poverty alleviation and rural revitalization in China's mountainous regions. It makes four significant contributions to rural revitalization, constructing livable and beautiful villages. First, by adapting to the farming conditions of mountainous regions with fragmented and more sloping farmlands, it protects the fragile ecological environment, providing a modernized development path for integrating up to three industries. Secondly, it uses the internal resources of villages at a meager cost and on a relatively small scale, which reduces the cost of farmers' participation in the business, making it more suitable for individual farmers to operate independently or for several farmers to collaborate. Third, it avoids plundering village resources by foreign capital and protects the autonomy of farmers' development and endogenous village sustainability. Fourth, it builds and strengthens a platform for the flow of urban and rural factors, deepens the interdependence of multiple subjects, and encourages the villagers to stay.

In addition, this study provides a Chinese-style development path for the sustainable development of the world's mountain villages. First, attention should be paid to environmental protection and cultural heritage in mountainous regions, adapting to local conditions, promoting the strengths of the countryside, developing environmental protection, and protecting ecological development to achieve a harmonious symbiosis between man and nature. Secondly, the function of the countryside as a farmer's home should be emphasized and encouraged. Farmers are the main body of the countryside, and the development must prioritize farmers' enthusiasm. Thirdly, rural industries should be built with farmers' participation so that the farmers can become the beneficiaries of rural development. This approach helps eliminate absolute poverty while facilitating sustainable development in mountainous villages. Promoting and applying China's successful experience in the sustainable development of mountainous villages has reduced global poverty, promoting rural revitalization and environmental protection in various fields. It has also contributed to achieving worldwide sustainable development and prosperity.

6. Conclusions

This study focuses on the emerging flower-viewing economy toward developing the economy of the Chinese mountain villages. Here, we constructed a theoretical framework to analyze how it promotes sustainable development in the mountain villages. Taking the Peach Blossom Festival in Tingzi Village, Taihe Township, as an example, this study assesses how this new industry promotes the sustainable development of mountain villages in three dimensions: material support, subject relationship, and expectation. From the three dimensions of "material support-subject relationship-expectation", we examined how this new business form of the Peach Blossom Festival promotes the sustainable development of Tingzi Village. On the one hand, we explored the relationship between humanity and nature in the festival through its spatial representations to deconstruct the logic of sustainable development of humanity and nature. On the other hand, we explored the relationship among humanity in the festival through subjective relationships to resolve the logic of sustainable development among humans.

A plethora of studies have hitherto concentrated on the impact of ecology or industry on the development of mountain villages [25]. This study proposes a novel theoretical framework, termed "material support-subject relationship-expectation", which offers a fresh perspective on the sustainable development of the 'people-land-industry' nexus in mountain villages. By exploring sustainable development from the perspectives of human-nature and human-human relations through a case study of the flower-viewing economy, it reveals the sustainable development logic between humans and nature, as well as among humans. This approach not only enhances resource efficiency and promotes industrial restructuring in mountain villages but also protects the mountain ecology and injects new vitality into the green development of villages. A limitation of this study is its focus on qualitative analysis. In future research,

the employment of quantitative methods to evaluate the impact of the ‘flower appreciation economy’ on the sustainable development of mountain villages is recommended, thereby providing stronger data support for policy formulation. Additionally, further investigation into the integration of the flower-viewing economy with other new rural businesses to form a diversified rural development model is advised, with a view to contributing more Chinese experience and wisdom to the global sustainable development of mountain villages.

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Author Contributions

J.Z.: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Visualization, Writing—original draft; C.W.: Conceptualization, Formal analysis, Funding acquisition, Investigation; H.D.: Data curation, Investigation, Visualization, Project administration; Z.W.: Data curation, Investigation, Visualization; X.C.: Data curation; R.L.: Investigation.

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Informed Consent Statement

Not applicable.

Data Availability Statement

Not applicable.

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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