Vol.7 Iss.1 2026
https://doi.org/10.37420/j.adr.2026.002
Art & Design Research

Design of the Cultural and Tourism Integration Path for the Revitalization of Red Villages in the Sichuan-Gansu Section of the Long March

Lifeng Sun[1*],Wanting Sun[2]
1.Academy of Fine Arts,Northwest Normal University,Lanzhou,Gansu 730070, China
2.College of Education,Lanzhou College of Foreign Studies, Lanzhou, Gansu 730300, China
***Corresponding author, E-mail: zbsn@nwnu.edu.cn**

Abstract:
The Long March stands as a significant spiritual symbol in the development history of Chinese civilization, with the historical retrospect and spiritual inheritance being the focal topics of current social attention. The red villages in the Sichuan-Gansu region, characterized by their unique Long March cultural background and multi-ethnic settlement, hold important strategic significance in terms of their development, protection, and integration with rural development. Based on the theoretical foundation of cultural genes, this study employs methods such as historical analysis, field investigation, and typical case analysis to elaborate on the integration of culture and tourism in two typical villages, Ludingqiao Village and Lazikou Village. It interprets cultural genes and verifies collaborative development paths, focusing on the innovative models and construction ideas of red village culture and tourism integration in the context of rural revitalization. The research questions center on the integration of theory and practice, summarizing successful experiences while pointing out existing contradictions and issues. This provides a new perspective for interdisciplinary research on the protection of red cultural heritage and rural revitalization. The data reveals a mutually reinforcing relationship between the inheritance of red culture and the upgrading of rural industries, facilitating the activation of cultural resources and a virtuous cycle of regional economic development. Finally, the study proposes a set of practical implementation plans for the integration of culture and tourism, which not only retains the core connotation of the Long March spirit but also explores innovative transformation methods in rural revitalization practices. Through practical verification in typical villages, red cultural heritage has demonstrated significant effects in enhancing rural economic vitality and optimizing cultural spatial layout.

Keywords:
Long March; Red Villages; Red Genes; rural revitalization;cultural and tourism integration

1 Introduction

Against the backdrop of the nation's active promotion of the deep integration of red cultural heritage and rural revitalization strategies, the red villages in the Sichuan-Gansu section of the Long March, with their

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

unique historical positioning and abundant red resources, have become a key area for promoting the coordinated development of the two. These villages have witnessed the arduous journey of the Long March, and their revitalization is of great significance for inheriting the red gene and promoting rural economic development. With the continuous deepening of the trend of cultural and tourism integration, how to transform red cultural resources into a driving force for rural revitalization has become an urgent issue to be addressed. The red resources in the Sichuan-Gansu section of the Long March are both concentrated and highly typical, with numerous revolutionary sites and relics. The deep integration of red culture with local folk culture and natural landscapes has created a unique regional characteristic. Such a unique combination of resources provides ample material and vast space for the integrated development of culture and tourism. Research on this area can provide reference for the revitalization of red villages in other regions.

2 Theoretical Basis

In the new era, revisiting red classics, reviewing red history, decoding red genes, and utilizing red resources are inevitable choices to enhance national and cultural self-confidence. The core theory of this article, the integration of culture and tourism, is an industrial integration model formed by combining cultural resources and tourism. It realizes the transformation of cultural value through the form of shaping tourism with culture and highlighting culture through tourism. In the context of red villages, the integration of culture and tourism manifests as the coordinated development of red cultural resources and ecological, ethnic, and other resources.

2.1 Theoretical basis and framework

The cultural gene theory, serving as the theoretical foundation of this study, originates from the concept of biological genes. Cultural genes, formed under specific temporal, spatial, and cultural environments, exhibit characteristics such as stability, heritability, and variability, similar to biological genes, and are quantifiable and inheritable [1]. Cultural genes constitute the basic units of culture, manifesting through material carriers [2]. Cultural genes not only involve spiritual culture such as beliefs, customs, and values but also encompass the material aspects of national culture. The manifestation of cultural genes in red villages is visible and tangible, representing the material expression of material culture and intangible cultural heritage in these villages, as well as the physical carriers of socio-economic, technological means, and cultural connotations. The extraction of cultural genes can be achieved through field research, visits, and literature review, collecting cultural element cases as widely as possible, including red village culture, historical sites, historical stories, dietary customs, agricultural culture, etc. Applying this theory to the protection and utilization of traditional red villages provides methodological references for the activation of red cultural genes. For example, Songyang County in Zhejiang Province, surrounded by mountains and boasting more than 100 traditional villages, has been rated as a demonstration county for the protection and development of traditional villages. Relying on its natural ecological scenery, it has expanded new tourism formats such as outdoor leisure, sightseeing tea gardens, and ancient village homestays, becoming a treasure trove of tourism. Songyang County adopts "cultural empowerment" as its core concept, vigorously carrying out the rescue of old houses, attracting artists from all over the country to come here for artistic creation, and many young people from other places have settled in Songyang County, allowing the homestay industry to develop and grow. New entrepreneurial mod-

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

els such as art homestays, intangible cultural heritage homestays, and bookstore homestays have emerged. Relying on its natural environment and ancient village resources, the renovation of homestays in Songyang County generally retains the original rural style, but enhances the design sense in architecture, thereby significantly improving the quality of homestays. The homestay industry in Songyang County has evolved from traditional agritourism-style homestays to high-quality boutique homestays. The optimization of the industrial structure and the upgrading of architectural quality have maintained a healthy and orderly development trend for the homestay industry.

2.2 Construction of theoretical framework

The cultural genes of the red villages possess distinct characteristics, including strong replication ability, good variation and adaptability, as well as a selective inheritance mechanism. For example, historical events with high social recognition such as the "Flying to Seize Luding Bridge" battle in Ludingqiao Village along the Sichuan-Gansu section of the Long March and the "Lazikou Battle" in Lazikou Village are typical manifestations of dominant genes. The historical weight condensed in the battle sites and the revolutionary spirit conveyed are the spiritual connotations of recessive genes. The dominant and recessive genes complement each other and jointly convey rich spiritual values. A systematic analysis of them can not only deepen the understanding of the historical and cultural connotations of the red villages, but also provide theoretical basis and practical reference for subsequent extraction and activation of cultural genes.

The most fundamental characteristic of red culture is its distinct "redness", which embodies the unity of revolutionary and progressiveness, scientific and practicality, localization and innovativeness, as well as inclusiveness and progressiveness [3]. Cultural and tourism integration takes red villages as spatial carriers, connecting cultural genes and the tourism industry. By developing red cultural resources, it can not only effectively protect and inherit red culture, but also activate and promote the common development of economic, social, and cultural activities, thereby promoting sustainable economic and social development. The key to making the historical relics in red villages alive through diversified ways and planning innovative high-quality cultural tourism products is to dig deep into the cultural heritage, explain the significance of value, and continue the historical context. Specifically, relying on the development of cultural tourism products, we should deeply interpret the cultural connotation and resource value contained in historical sites, while properly protecting them, systematically study, dig deeply, accurately explain, scientifically evaluate and widely spread historical information, traditional cultural connotation and deep value, reveal the cultural genetic code of civilization inheritance, and clarify the symbols of traditional culture, so that tourists can understand the red spirit and historical culture in the experience.

The enhancement of the functions of red resources needs to be achieved through a process of protection, reconstruction, and optimization. The protection process mainly involves the restoration of revolutionary sites, such as the restoration of cultural relics at the Battle Site of Lazikou Village. The reconstruction process mainly focuses on the functional layout of traditional red villages, such as the planning of "one axis, two lines, and two bases" in Shenquan Village, Jia County, Yulin, Shaanxi Province. There are two main routes: an entrance axis and immersive learning of red culture, and a main route for experiencing red culture through homestays. There are also two bases: a red tourism and cultural education base and a special agricultural product experience base. The optimization process mainly involves improving infrastructure and support-

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

ing services, adding sightseeing buses, tourist centers, parking lots, and other facilities to the site area. With cultural genes as the core and red villages as the material foundation, an interactive model that integrates cultural tourism between the two is established. This promotes the collaborative development of red cultural gene activation and cultural tourism innovation, providing theoretical support and practical reference for the protection and activation of red villages in the Sichuan-Gansu section of the Long March, and facilitating the inheritance of red culture and the sustainable development of the cultural tourism industry.

3 Issues in the integration of culture and tourism in the red villages along the Sichuan-Gansu section of the Long March

The integration of culture and tourism is the trend of China's tourism industry development in the future. Culture is the soul of tourism, and tourism is the carrier that carries culture. Under the mode of integrating culture and tourism, various problems have emerged in the process of promoting the development of cultural and tourism resources, affecting the development quality of cultural tourism. The Sichuan-Gansu section of the Long March is the core witness site of the Long March history, possessing a composite resource system of red cultural heritage and multi-ethnic regional culture. Its development of integrating culture and tourism not only has important value at the national strategic level, but also faces a series of structural contradictions due to the constraints of geographical conditions, economic foundation, ecological conditions, and other multiple factors.

3.1 The cross-provincial collaboration mechanism is not sound, making resource integration difficult

The red villages in the Sichuan-Gansu section of the Long March span across Sichuan and Gansu provinces. Due to administrative divisions, issues such as insufficient coordination and inconsistent policy standards persist in the protection and development of red resources, leading to a prominent phenomenon of fragmented resources. The planning of Sichuan and Gansu provinces is not synchronized. Sichuan focuses on the integration of red culture and ecology, incorporating the Zoige Wetland and red sites into the planning of the Yellow River National Cultural Park. On the other hand, Gansu emphasizes the integration of red culture and folk culture, with a focus on exploring the combination of red culture and Tibetan folklore in the Gannan Tibetan area. Sichuan and Gansu have not established a unified red resource survey system and registration standards, resulting in differences in core aspects such as survey scope, site classification, and value assessment. The Sichuan region has initiated repairs, while the Gansu region is still in the planning stage, ultimately leading to fragmented spatial development. In terms of financial investment, constrained by administrative barriers, a cross-provincial fund coordination mechanism has not been established, and the use of funds exhibits fragmented characteristics, resulting in a structural imbalance between resource investment and actual demand. Non-material cultural heritage projects such as Tibetan Thangka and Qiang embroidery are mainly displayed in showcases in the cultural tourism products of Sichuan and Gansu provinces. A cross-provincial integrated product system combining red stories and intangible cultural heritage skills has not been established. For example, the historical scenes of the Red Army's crossing of the grasslands, which were recorded by Tibetan people using Thangka, have not been transformed into specific experiential cultural tourism projects, result-

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

ing in the insufficient exploration of the cultural and economic value of related resources.

3.2 Insufficient exploration of intangible cultural heritage and weak ability to transform its value

The current cultural and tourism development in the Sichuan-Gansu section still centers around tangible heritage, with significant shortcomings in the exploration and transformation of intangible cultural heritage such as the red spirit and folk cultural activities, making it difficult to effectively disseminate the spiritual value of red culture. The tourism model remains monotonous. Most scenic spots in the Sichuan-Gansu section of the Long March still adopt the traditional model combining site visits and museum displays, with a single theme and repetitive content. For example, many red museums in Sichuan and Gansu feature the Long March journey as their theme, lacking differentiated displays and thus failing to arouse tourists' interest in visiting. The commentary provided by scenic spot guides is formulaic, focusing on basic information such as the time, location, and tasks of historical events, while lacking sufficient interpretation of the contemporary connotation of the red spirit, resulting in tourists staying at scenic spots for a short time. The folk activities in red villages in the Sichuan-Gansu section are mostly presented independently, without being integrated with red historical culture. The integration of folk activities and red culture is low. For example, Tibetan Guozhuang dance performances are merely presented as folk programs, without incorporating the historical scene of the Red Army and Tibetan people dancing together. The Tibetan intangible cultural heritage is only superficially reflected, preventing tourists from deeply experiencing the mutual assistance between the Red Army and Tibetan people, leading to insufficient participation and incomplete transformation of the value of intangible cultural heritage.

3.3 Imbalance between infrastructure and public service supply, with service quality constraining development

The red villages in the Sichuan-Gansu section of the Long March are mostly located in economically underdeveloped ethnic minority areas with limited financial investment capacity. The infrastructure and public service supply are difficult to meet the needs of cultural and tourism development, which has become a key constraint on the length of stay and quality of experience for tourists. The construction of transportation facilities in most areas of the Sichuan-Gansu section lags behind. The connecting roads between scenic spots are mostly fourth-class highways with narrow roads and many curves. In winter, they are blocked due to snowy weather, and public transportation coverage is insufficient, forcing tourists to drive or charter vehicles, which increases travel costs. Most scenic spots have significant gaps in public service facilities. The red villages in the Sichuan-Gansu section of the Long March are mostly located in plateau areas, with insufficient water supply, heating, and oxygen supply facilities. The capacity for domestic waste disposal is inadequate, and garbage is randomly piled up, damaging the ecological environment and affecting tourists' travel experience. There is a lack of smart tourism services in scenic spots. Only a few scenic spots have opened online reservation systems, and most villages lack electronic guides and intelligent consulting services. Tourists have difficulty obtaining information, and the wireless network coverage in scenic spots is insufficient, reducing the quality of tourists' experience.

3.4 The contradiction between ecological protection and development is acute

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

Many of the red villages in the Sichuan-Gansu section of the Long March are located in ecologically fragile areas, where the self-repair capacity of the plateau ecosystem is weak. Therefore, the contradiction between ecological protection and cultural tourism development is particularly prominent, which has become a core obstacle restricting the sustainable development of regional cultural tourism. Overload of ecological carrying capacity and limited infrastructure construction, such as the expansion of scenic roads in the Battle of Lazikou site scenic area to improve traffic capacity, are difficult for tourists to reach due to the involvement of natural reserve buffer zones. Sichuan and Gansu provinces have not yet issued specific implementation details for the coordination of the two, and the implementation of policies lacks refinement. The intensity of cultural tourism development, infrastructure construction standards, and measures for controlling tourist capacity corresponding to different levels of ecological protection in different areas have not been clearly defined, leading to contradictions between ecological protection and cultural tourism development in grassroots practice. The proportion of scenic area development revenue used for ecological protection is small, and villagers are restricted from developing tourism due to ecological protection without receiving economic compensation. For example, due to ecological protection, the expansion of guesthouses in Maqu County is prohibited, causing some villagers to lose their source of tourism income, thus resulting in a serious lack of initiative and enthusiasm for ecological protection.

4 Path design for the integration of culture and tourism in red villages

Based on the theory of cultural genes, in response to the core issues faced by the red villages in the Sichuan-Gansu section of the Long March, such as the lack of cross-provincial collaboration, insufficient exploration of intangible culture, lagging infrastructure services, contradictions in ecological development, and homogenization of business formats, combined with the resource endowments and development difficulties of Ludingqiao Village and Lazikou Village, we will construct a path framework for activating cultural genes and innovating cultural tourism models, achieving the coupling of red cultural inheritance and rural revitalization.

4.1 Establish a cross-provincial collaboration mechanism

Addressing the issues of unsynchronized planning, inconsistent standards for red resource surveys, and fragmented funding investment between Sichuan and Gansu provinces, it is necessary for the two provinces to collaborate to integrate Ludingqiao Village and Lazikou Village into the overall development system of the Sichuan-Gansu section, achieving resource integration and maximizing benefits.

Led by the cultural and tourism departments of Sichuan and Gansu provinces, a Red Cultural and Tourism Integration Development Alliance for the Sichuan-Gansu section of the Long March has been established. This alliance integrates Ludingqiao Village and Lazikou Village into a unified cross-provincial planning, designing a composite tourism route that includes visiting red historical sites, experiencing ecological activities, and participating in folk culture. The route starts from the Ludingqiao Bridge Site, connects the Hailuogou Plateau Ecological Zone and the Lazikou Battle Site, and ends at the Zhagana Tibetan Folk Custom Area, thus solving the problem of disconnected original routes. In terms of transportation infrastructure, the transportation departments of the two provinces have been coordinated to implement the upgrading project of the connecting section from Ludingqiao to Lazikou, widening the fourth-class highway to a two-way two-lane

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

road, and opening a red tourism dedicated train to enhance cross-provincial accessibility. A schematic map of the cross-provincial red tourism route from Ludingqiao to Lazikou has been drawn, marking core scenic spots such as the Ludingqiao Bridge Site, Hailuogou Ecological Station, Lazikou Battle Site, and Zhagana Folk Village. The transportation modes include dedicated train stops and upgraded highway sections, and service facilities include midway tourist centers and smart guide points, visually presenting the collaborative logic and functional zoning of the route. Efforts are made to promote the establishment of a special fund for cross-provincial cultural and tourism development in the two provinces, giving priority to supporting infrastructure projects in the border areas of the two villages, such as road hardening projects from Luqu County to Lazikou Village and the construction of a smart guide system in the Sichuan-Gansu border area, to enhance the overall tourist reception capacity of the region.

4.2 Deepen the activation of cultural genes

Addressing the issues of insufficient exploration of intangible cultural heritage, monotonous touring patterns, and superficial interpretation content, it is necessary to rely on the cultural gene differences between the two villages to promote the transformation of red culture from static display to dynamic experience, and strengthen the dual efficacy of spiritual value dissemination and economic value transformation. Due to excessive commercialization, traditional residential houses in Ludingqiao Village have been transformed into shops, weakening the symbols of red culture. It is necessary to reshape the core competitiveness through cultural purification and business model innovation. Digital rubbing technology is used to authentically restore the Red Army slogan wall in the village, preserving historical traces. The idle former site of the Red Army hospital is transformed into a Red Army field medical experience hall, replacing the single site visit mode by restoring surgical instruments and simulating casualty treatment scenes. Combining Tibetan and Qiang cultural characteristics, an immersive sitcom titled "The Brave Assault on Luding Bridge" involving villagers' participation is created, incorporating Tibetan folk songs and Qiang embroidery skills to restore historical scenes of mutual assistance between the Red Army and local people. Red Tibetan and Qiang cultural and creative products are developed, based on Qiang embroidery skills, designing hangings with themes such as the Red Army crossing the snow mountains and Tibetan woodcarving craftsmanship to create theme ornaments for the Battle of Luding Bridge. Meanwhile, the Long March food culture is explored, forming a product transformation logic combining intangible cultural heritage skills and red stories. A logical diagram of red Tibetan and Qiang cultural and creative development in Ludingqiao Village is drawn, presenting historical materials vertically: mutual assistance between Red Army soldiers and civilians, the Brave Assault on Luding Bridge; intangible cultural heritage skills: Qiang embroidery, Tibetan cooking, Tibetan woodcarving; product forms: cultural and creative hangings, specialty foods, craft ornaments; market output: transformation chain of scenic area stores and online e-commerce platforms, with horizontal annotation of villagers' participation nodes in each link, such as villagers' embroidery workshops and cooking skills training, reflecting the linkage effect of cultural activation and villagers' income increase.

Lazikou Village relies solely on site visits and basic explanations, and needs to enhance the experiential aspect by leveraging the plateau ecology and Tibetan culture. It is necessary to explore the red connotation of the Tibetan Guozhuang dance, upgrade the original independent Guozhuang performance to an interactive experience project, where tourists can learn basic movements under the guidance of local folk artists and ex-

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

perience the close relationship between the military and civilians. Local folk artists can be organized to create Thangka paintings with themes such as the Red Army crossing the grasslands and the Battle of Lazikou, and a Thangka experience workshop can be set up where tourists can participate in basic parts such as line drawing and coloring, replacing the original display cabinet display mode. Digital technology can be utilized to recreate the process of the Battle of Lazikou, allowing tourists to participate in battle decision-making through immersive equipment, such as choosing attack routes and simulating material supply, to compensate for the original museum's repetitive and weak attraction content. Bilingual intelligent interpretation boards in Tibetan and Chinese can be set up in the site area to interpret deep content such as the Red Army's tactical wisdom and plateau marching material supply strategies, replacing the original patterned superficial interpretation.

4.3 Optimize infrastructure and public services

In response to the issues of lagging transportation facilities, significant gaps in public services, and a lack of smart tourism services, differentiated improvement strategies need to be implemented based on the developmental stage differences between the two villages, in order to strengthen the fundamental supporting capabilities for cultural and tourism development.

Ludingqiao Village already has a certain infrastructure foundation, with the focus on addressing the issues of insufficient smart services and homogenization of services. In the core scenic spots of the village, such as the Ludingqiao Site, the Red Army Square, and the Memorial Hall, free wireless internet coverage is provided; the Ludingqiao Red Cultural Tourism APP is developed, offering functions such as historical information inquiry of the site, intelligent recommendation of sightseeing routes, and real-time crowd flow warning; intelligent consultation terminals are set up in the Memorial Hall and the tourist center, supporting online appointment for explanations and booking of cultural and creative products. Special training for bilingual Tibetan-Chinese guides is carried out, covering in-depth interpretation of red history, such as the strategic significance of the Ludingqiao Bridge capture, the ethnic policies of the Red Army's Long March in Tibetan areas, and Tibetan and Qiang folk culture knowledge; business operation norms are formulated to guide shops to focus on the sale of red cultural and creative products, Tibetan and Qiang specialties, and prohibit the sale of homogenized small commodities. At the same time, a commercial relocation plan is implemented to relocate shops from the core site area to peripheral commercial districts, restoring the traditional residential style.

Lazikou Village has weak infrastructure and needs to rely on policy funds to strengthen basic support. We should strive for special funds from the National Cultural Park to build a standardized tourist center, such as equipping with oxygen supply and heating equipment for high altitudes and constructing an ecological parking lot paved with grass-planting bricks. We should open a tourist line from Lazikou Village to Zhuoni County to compensate for the lack of public transportation coverage and reduce travel costs for tourists. We should improve the water supply system and domestic waste disposal station in the village to solve the ecological and experience problems of random garbage disposal. In response to the high rate of young people leaving home to work, we should collaborate with cultural and tourism colleges and universities in the two provinces to carry out cultural and tourism skills training. We should establish training courses such as homestay management, red story interpretation, red research and learning activities, and intangible cultural heritage skills inheritance. After training, priority should be given to recommending them to work in homestays and scenic spots in the village. We should establish a Lazikou Red Army Homestay Cooperative to transform villagers'

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

unused Tibetan-style wooden houses into themed homestays, retaining traditional architectural features while equipping with modern bathroom facilities to solve the dilemma of relying solely on site visits.

4.4 Establish a collaborative mechanism that integrates ecology and development

Addressing the issues of ecological carrying capacity overload, lack of detailed policy implementation, and inadequate ecological compensation mechanisms, it is necessary to establish a collaborative mechanism that integrates protection and development, taking into account the ecological location differences between the two villages, in order to achieve sustainable development of cultural tourism.

The high volume of tourists in Ludingqiao Village is prone to exert ecological pressure, necessitating the strengthening of ecological capacity control and the replenishment of development revenues. By conducting ecological monitoring of soil fertility and vegetation coverage, we determine the maximum daily tourist capacity and implement online reservations to limit the flow of visitors. We convert idle land resulting from commercial relocation into ecological green spaces, planting local native plants such as alpine pine and rhododendron to enhance the regional ecological capacity. A portion of the revenue from scenic spot tickets and cultural and creative product sales is allocated as an ecological protection fund, specifically used for vegetation restoration, garbage disposal, facility maintenance, etc. around the site, achieving development feedback protection. For villagers affected by commercial relocation, priority is given to arranging them to participate in ecological management and protection, scenic spot cleaning, and other work, ensuring income sources and enhancing their initiative in ecological protection.

Lazikou Village is close to a nature reserve, so it is necessary to clarify the development boundaries and compensation standards. The core area of the Lazikou Battle Site will only retain the function of visiting, and no new buildings are allowed. Within a 1-kilometer radius of the village, it is permitted to renovate guesthouses, but they must conform to Tibetan style and environmental protection standards, such as using environmentally friendly building materials and installing sewage purification equipment, to avoid the problem of villagers losing income due to the prohibition of expanding guesthouses. Build intangible cultural heritage experience workshops and cultural and creative stores to moderately develop commerce. Establish a provincial-level special fund for ecological compensation, and provide annual compensation payments to villagers whose development is restricted due to ecological protection, on a household basis. Incorporate ecological protection into the assessment of guesthouse operations, and provide economic subsidies to those who meet annual environmental protection standards, guiding villagers to actively participate in ecological protection.

In summary, by comparing the cases of Ludingqiao Village in Sichuan Province and Lazikou Village in Gansu Province, this study reveals the common patterns and differentiated paths of cultural and tourism integration in red villages. The common revelation lies in the fact that cultural genes are the core driving force. The warrior spirit and Tibetan-Qiang culture of Ludingqiao Village, as well as the Red Army tactical wisdom and plateau ecology of Lazikou Village, all rely on unique cultural genes to form competitiveness. Villager participation serves as a sustainable guarantee, with both villages enhancing villagers' enthusiasm through cooperative models. The differentiated paths are reflected in Ludingqiao Village's approach to resolving the contradiction between commercialization and authenticity through the combination of cultural purification and business format upgrading, and Lazikou Village's breakthrough of resource constraints, such as regional

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

alliances and policy fund acquisition. These two cases jointly verify the feasibility of the path framework and provide practical examples for the cultural and tourism integration of red villages in the Sichuan-Gansu region.

5 Conclusion

This study focuses on the red villages in the Sichuan-Gansu section of the Long March, exploring the path mechanism for the protection of red cultural genes and the integrated development of culture and tourism through theoretical construction and case studies. The research indicates that the integration of culture and tourism in red villages requires the authenticity of cultural genes as a prerequisite, achieving the contemporary transformation of red spirit and ethnic culture; and breaking through the dilemma of homogenization through diverse models. The cases of Ludingqiao Village and Lazikou Village demonstrate the practical value of integrating cultural genes with culture and tourism, and their differentiated paths can serve as references for red villages at different stages of development. Future research will further deepen the empowering mechanism of digital technology for activating red cultural genes, explore dynamic models that combine protection and development in ecologically fragile areas, and improve policy tools for cross-provincial regional collaborative governance. The theoretical contribution of this study lies in introducing the theory of cultural genes into the research on red culture and tourism, while its practical value lies in providing programmatic references for the construction of the Long March National Cultural Park, facilitating the deep integration of red cultural inheritance and rural revitalization strategies.

Funding

This paper is a phased research achievement of the general project "Research on the Gene Decoding of Red Villages in the Sichuan-Gansu Section of the Long March and the Collaborative Pathway for Rural Revitalization" (ProjectNo.:MD25B025) of the Modern Design and Culture Research Center, a key research base for philosophy and social sciences in Sichuan Province.

References

[1] Zhang Yanling, Yang Haoming, Yang Xidong, et al. Research on Extracting the Cultural Gene Map of Lingnan Landscape Architecture [J]. Guangdong Landscape Architecture, 2024, 46(06): 35-43.

[2] Bi Mingyan. Research on the Path of Rural Cultural Gene Inheritance [D]. Suzhou University of Science and Technology, 2011.

[3] Li Huilin. Understanding, Identification, and Inheritance: Three Links in Exploring the Contemporary Value of Red Culture [J]. Journal of Ideological and Educational Research, 2019, (02): 106-109.

[4] Liu Jianping, Wang Hongshu. The Contemporary Value and Development Approach of Red Cultural Resources in Tibetan Areas of Sichuan Province - Taking Ganzi Prefecture as an Example [J]. Theoretical Observation, 2016, (01): 105-109.

[5] Chen Fuyu, Li Xinyu, Liu Jinyang. Exploration and Innovation of Rural Revitalization in Revolutionary Base Areas under the Background of Cultural and Tourism Integration: A Case Study of Shenquan Village,

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)

Jia County, Yulin City [J]. Modern Horticulture, 2024, 47(03): 104-106+109.
[6] Qiu Jian. Empowering Rural Revitalization with Red Cultural Resources in Ganzi Prefecture [J]. Village Committee Director, 2024, (07): 191-193.
[7] Luo Shaowei. Research on the Integration Strategy of Red Cultural Resources in Gansu Province Empowered by Digital Intelligence [J]. Comparative Study of Cultural Innovation, 2025, 9(07): 88-91+105.

© 2025 by the author(s); licensee Mason Publish Group, this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (http://creativecommons.org/licenses/by/4.0/)