

Analysis of Traditional Village Architecture Style and Research on Protection and Utilization Strategies: A Case Study of Niba Village in Zhuoni County

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Abstract

Traditional villages are concrete carriers of the inheritance of Chinese traditional culture, containing different humanistic customs, historical culture, and production forms, embodying the nostalgia and emotional memories of Chinese people in rural life. In the context of rural revitalization, strengthening the protection and development of traditional villages is conducive to inheriting Chinese civilization, protecting cultural heritage, and building a beautiful China. However, in practice, the protection and development of traditional villages face various constraints, and corresponding measures need to be taken to support the protection and development of traditional villages.

Tibetan traditional architecture has its own system and unique style, especially Tibetan traditional residential architecture, which has been influenced by different geographical climates and cultural environments, giving birth to different architectural styles in each region. Gannan Tibetan Autonomous Prefecture is located in the southwest of Gansu Province, at the transitional zone between the Qinghai Tibet Plateau and the Loess Plateau, and is also the border area between Han Tibet and Tibetan Hui. Since ancient times, it has been a region where ethnic groups coexist, trade and agriculture coexist. Through long-term ethnic migration and communication, exchange, and integration among various ethnic groups, the Gannan Tibetan area has formed a pattern of diverse ethnic settlements. The unique architectural style and folk customs are fully reflected in the local residential buildings in Gannan, giving rise to rich traditional residential styles.

Keywords

Traditional Villages; Architectural Style; Niba Village; Protection And Utilization

1. Introduction

In May 2022, the General Office of the Communist Party of China Central Committee and the General Office of the State Council issued the "Implementation Plan for Ru-

ral Construction Action", which proposed to inherit and protect traditional village dwellings and excellent local culture, highlight regional and rural characteristics, preserve the rural style with local characteristics and local flavor, prevent mechanical copying of urban construction models, and create a modern version of the "Fuchun Mountain Residence Map" with unique features. The Plan also clearly states the need to further strengthen the protection and utilization of historical and cultural towns, villages, traditional villages, and traditional dwellings; Protect ethnic villages, characteristic dwellings, cultural relics, agricultural relics, and folk customs. By studying the traditional villages in the region, we can further enrich and improve the protection and inheritance system of traditional villages.

Ethnic traditional villages are precious heritage of Chinese agricultural culture, important objects of rural revitalization strategy, and material carriers for strengthening the sense of community of the Chinese nation. With the rapid advancement of industrialization and urbanization in China, problems such as rural hollowing out, aging, and low vitality are becoming increasingly serious, posing greater challenges to the historical and cultural inheritance of traditional villages. Between 2000 and 2023, the number of natural villages in China decreased from 3.63 million to 2.36 million, with an average annual decrease of over 55000, including a large number of traditional villages. The protection and development of traditional villages in China are facing enormous challenges. Therefore, it is necessary and urgent to study traditional villages. Under the comprehensive effects of unique regional environment, historical culture, and socio-economic factors, traditional villages in Gannan have formed unique spatial characteristics. The interaction and coexistence of multiple ethnic groups have created a space for communication, exchange, and integration. Long term social changes have left behind differentiated and developmental forms. In terms of the types, environments, landscapes, and cultural diversity exhibited by traditional villages themselves, traditional villages in Gannan Prefecture have special value and unique social influence. Studying the architectural style of traditional villages is not only necessary for protecting the diversity of Chinese culture, but also fills the gap in previous research on traditional villages of ethnic minorities.

2. Analysis of Related Concepts

2.1. Analysis of Related Concepts

Traditional villages refer to both material and non-material forms of villages with high historical value, cultural connotation, artistic and scientific value. This cultural heritage has high social and economic value. It emphasizes the integrative nature of traditional society, incorporating economic activities based on specific natural and ecological systems into the basic content of traditional village protection.

Traditional villages in our country are products of the integration of humans and the natural environment. They adhere to certain principles of historical materialism, follow the essence of economic life from the perspective of agricultural civilization,

and have certain core values. They can not only meet the needs of various ethnic groups, but also ensure the stable continuation and self-renewal of the natural environment and ecosystem, that is, they have sustainable operation capabilities.

2.2. Ethnic traditional villages

Ethnic traditional villages refer to natural or administrative villages where ethnic minority populations are relatively concentrated and have a high proportion, complete production, living and survival functions, and well-equipped living environment facilities. The cultural and settlement characteristics of ethnic minorities are obvious. Ethnic traditional villages embody the diversity of Chinese culture in terms of village style, residential architecture, folk customs, and industrial structure. They are the historical process of the formation and evolution of ethnic village settlements in different cultural types, periods, and regions. As an effective carrier of ethnic cultural inheritance, traditional ethnic villages enable the complete preservation of the cultural genes of various ethnic minorities, and the historical crystallization of their cultures is condensed, further accelerating the development of ethnic groups and ethnic regions.

3. Current situation analysis

Before you begin to format your paper, first write and save the content as a separate text file. Keep your text and graphic files separate until after the text has been formatted and styled. Do not use hard tabs, and limit use of hard returns to only one return at the end of a paragraph. Do not add any kind of pagination anywhere in the paper. Do not number text heads—the template will do that for you.

Finally, complete content and organizational editing before formatting. Please take note of the following items when proofreading spelling and grammar:

3.1. Overview of the Current Situation in Gannan Prefecture

Gannan Tibetan Autonomous Prefecture is located in the southwest of Gansu Province, and is the junction of Gansu, Qinghai, and Sichuan provinces. Geographically located in the transitional zone between the Qinghai Tibet Plateau and the Loess Plateau, it belongs to the cultural category of the Amdo Tibetan region in China. It has jurisdiction over 7 counties including Hezuo City, Lintan County, Zhuoni County, Diebu County, Zhouqu County, Xiahe County, Maqu County, and Luqu County.

3.2. Analysis of the Current Situation of Niba Village

Niba Village is a village under the jurisdiction of Niba Township, located in the southwest of Zhuoni County, southern Gansu Province. Its geographical location belongs to the northern radiation area of the Tibetan Qiang Yi Corridor in Niba Township, Zhuoni County, Gannan Tibetan Autonomous Prefecture. The residential buildings in Niba Village are unique, arranged in a staggered and layered manner,

with a distinctive and ancient elegance. The ancient streets and architectural complexes of Niba Village are well preserved, with a unique natural environment and strong regional characteristics. They are protected and utilized according to the ecological museum model, forming a highly representative cultural landscape among the Tibetan dwellings in Gannan.

3.3. The village form and spatial pattern of Niba Village

Niba Village is set against the backdrop of Huagai Mountain and Guanggai Mountain on the south side, and Baima Mountain on the north side, with the Cheba River in the middle as the link. The overall village has a natural shape of "two mountains sandwiching one river". The village is divided into new and old villages by the Cheba River, forming a spatial pattern of "new in the south and old in the north, facing each other across the river".

The old village is located on a relatively flat slope of Baima Mountain, with a natural pattern of "east-west line". The old village faces north and south as a whole, with its interior organized by wooden boardwalks along the contour lines and small paths between houses along the mountain terrain. There are stone bridges on both sides of the old village leading to the new village.

Xincun is located in the riverbank area on the south side of the Cheba River. It follows a development model that extends along the road and spreads out around public buildings, forming an overall "belt shaped+block shaped" structure with the road as the skeleton for internal spatial organization. The main road winds along the Cheba River, paved with cobblestones and about 3m wide. It connects to County Road 412 externally and core buildings such as stone bridges, manicured houses, and basketball courts internally, linking the village into an organic whole. Branches are perpendicular to the main road and are often of the end end type. The residential buildings are arranged along both sides of the branch road, making the entire village face the White Horse God Mountain. Manifang, Baida, and Zhuanjingfang occupy the high ground of the new village and have the characteristics of typical ethnic villages. Their roads and residences radiate and diverge from the surrounding areas with public buildings as the core.

3.4. Analysis of Traditional Residential Houses in Niba Village

Located in Niba Village, Niba Town, Zhuoni County, this is a Tibetan village with a history of over 200 years. The residential buildings are mainly traditional Tibetan style thatched roofs with "no wood on the outside and no soil on the inside". The dense thatched roofs are built along the mountains and waters, from low to high, staggered and stacked layer by layer. Each household is connected by a single wooden ladder and an overhead boardwalk, and from a distance, it looks like it is hanging on a hillside, with a feeling of a Tibetan style hanging house. Zangzhai is a complex of material cultural heritage and intangible cultural heritage, with ex-

tremely high cultural relic value, recording the traditional architectural style and folk customs.

3.5. Spatial Evolution of Niba Village

The overall spatial evolution of Niba Zangzhai can be divided into the following four stages according to the scale of settlement morphology:

1) Scattered distribution stage

According to the villagers of Niba, the original residents of the Tibetan village once lived on the Ruorgai grassland, living a life of chasing grass. The ancestors of the Houniba people migrated to the Cheba Gully in Zhuoni, preserving the common form of living on the grassland - the black tent, which is woven from yak hair. In the pastoral areas of Niba Township, people can still see such tents that can withstand rain and snow. At this time, people lived together on a family basis, with blood ties or neighboring families living together sporadically and helping each other. Later, due to the severe cold climate in the area, the accounting houses could not withstand it, so the next stage of earthen houses emerged.

2) Large area forming stage

This kind of earthen house is called "Dongwozi" in pastoral areas, which is a temporary residence for herdsmen to live in winter. Due to the heroic nature of the Tibetan people in ancient times, they often occupied other tribes in order to accumulate wealth. Only through unity can the family resist the invasion of foreign tribes. The expansion of the population inevitably led to the division of grasslands and the gradual increase of territory. Some herders had to graze in remote areas, which was difficult and lonely, but still the main source of income. This conflicted with the comfortable settlement life. The nomadic life was broken, and later with the prosperity of the settled population, the policy of "multiple seals and reconstruction" was implemented. Temple offerings and the pursuit of high-quality life promoted the emergence of large settlement settlements. The old village near Yangpo, which can still be seen today, emerged under such circumstances.

3) Expansion and Constant Stage

At this time, the earthen houses were somewhat similar to the form of winter cottages in pastoral areas, with one or more walls facing the mountain as the building, and separate animal sheds or grass rooms. The courtyard space should have been basically finalized at this time, and with the increase in population, some old buildings were added in the southeast; The land shortage has led to the spread of architectural settlements from mountaintops near riverbeds, with smaller courtyards and a sudden increase in building density. The form of settlements has evolved from disorder to order. The slope near the river is steep, and the livestock and storage buildings are located on the lower level in the form of "wooden bags". After a certain period of time, with the influence of backward production relations and technology, as well as Tibetan Buddhism, villages were constrained by factors such as backward

production relations, religious offerings, and chieftain jurisdiction, exhibiting a relatively constant state.

4) Redevelopment stage

In the early days of the founding of the People's Republic of China, disasters occurred frequently, and coupled with geographical remoteness, settlements were basically stagnant at this time. However, in the vicinity of the Cheba River, due to the relatively low defensive nature of the "cutting wooden bags" built along the river during the Cultural Revolution, temples were destroyed, monks were expelled, the economy was backward, and village development once again stagnated. It was not until the reform and opening up, policy changes changed the backward production mode, and the village ushered in a housing boom in the 1980s. At this time, due to the existence of the Gongba Temple in the surrounding area, as well as the weakening of the consciousness of religious rule and limited financial resources, no new temples were built in the village, especially due to the enmity with the Jiangwan tribe, and the development still lagged behind other Tibetan villages. However, religious space is still essential in the village, so a religious space called Mani House, a scripture room, and a white tower were built on the site of the original Zhangjie Dumu Bridge. Gradually, due to the narrow boardwalk on the mountain, which was inconvenient for transportation, and the Tibetan people's unwillingness to destroy their religious beliefs on the mountain, wealthy families moved one after another. At this time, village construction was no longer affected by defense needs. At this point, the growth of village dwellings began to expand radially along the Mani houses. It cannot be ignored that the Jiangdi Highway and the Mamin Highway have been constructed in recent years. As a result, some residents have started to build houses along the highways, gradually merging with the radiating and expanding residential areas centered around Mani houses. In just 30 years, a majestic and stable village style has been formed.

4. Existing problems of traditional dwellings in Niba Village

4.1. The phenomenon of 'hollow villages' is serious

In recent years, with the rapid advancement of urbanization, the differences between urban and rural areas in Gannan Tibetan region have become more apparent. Young and middle-aged laborers in villages have migrated to cities for work, and the permanent population in villages continues to decrease. A large amount of land is idle, resulting in the phenomenon of "hollowing out" and "aging". Regarding this issue, it has not been mentioned in the existing village planning results, indicating that the planning has deviated from the actual development of the village. The main reason for this is that the current situation survey in the early stage of planning did not increase, and predicted a large population and land use, which is completely inconsistent with the actual village construction. In this context, if included in the list of traditional Chinese villages, it will undoubtedly bring certain difficulties to the later

protection planning of traditional villages at the operational level. In addition, some courtyards in the village are uninhabited all year round, and various types of farm-houses cannot be maintained normally. Some excellent traditional buildings are also constantly being naturally damaged, which is not conducive to the protection of the overall pattern of traditional villages.

4.2. Modernization of Traditional Villages

Traditional villages have been influenced by various factors in their development process, with globalization and modernity having a particularly significant impact on them. To some extent, with the improvement of economic level, villagers' requirements for their own quality of life will also become higher and higher, which is gradually reflected in the renovation of houses by villagers. Villagers use cement, satellite antennas, solar water heaters, iron sunshade roofs, and unreasonable sewage pipe installations on the roofs of their settlements for convenience, which must be given sufficient attention. The situations that have occurred in this region also exist in other traditional villages. How to properly handle the daily needs of villagers and protect traditional villages while coordinating with the surrounding environment has become a problem that traditional villages must pay attention to in the process of development.

4.3. Economic model changes village development

With the development of the times and the improvement of economic level, local people no longer rely on traditional farming and animal husbandry. Due to the gradual development of the modern tertiary industry and the pursuit of urban life-style by the younger generation, the traditional family model of coexistence of residential houses has gradually been broken, and the traditional form of housing has also undergone significant changes as a result. The changing economic model is constantly impacting the relatively slow developing ethnic autonomous prefecture of Gannan. Homeowners' demand for residential functions is no longer limited to their own living and storage and breeding in the production process. Many traditional villages have gradually developed into tourist villages or Taobao Hongcun. Many traditional residential buildings have been abandoned or abandoned because their important cultural attributes and protection values have not been emphasized. Among them, a relatively well preserved part has been demolished by the inheritors of ancestral homes, and large scale middle-level hotels or homestays have been built on the original homesteads. It has gradually begun to depart from the precious features of traditional villages and dwellings.

5. Construction of protection and utilization strategies

5.1. Strengthen the awareness of protecting traditional culture and enhance the enthusiasm of villagers to participate

The process of protecting traditional villages, from being a branch of rural economic development to becoming an important part of rural cultural construction, to leading the development of rural cultural ideology, has gone through a transition from being subordinate to leading development. The ethnic minorities in Gannan area are relatively concentrated, with simple folk customs. Traditional villages, as a new concept, are deeply understood by villagers and consciously invested in protection work, which requires a process. In this process, it is necessary to increase publicity efforts in various forms. In addition to relying on news media reports, village regulations and agreements should also be established within the village. Through forms such as village meetings, broadcasting, and bulletin boards, the significance and necessity of protecting traditional villages should be promoted. During the stage of resource utilization and development, the wishes of villagers should be fully consulted to ensure their right to know, management, and supervision, and to ensure that they enjoy various benefits and rights. Villagers should fully realize that they are the masters of the village, and they have the responsibility and obligation to preserve the precious heritage left to them by their ancestors, thereby enhancing their sense of subjectivity and stimulating their enthusiasm for participating in the protection and construction of traditional villages. When the time is ripe, modern information technology should be applied to establish a digital museum of traditional villages, which can realistically and completely reproduce traditional production scenes and living conditions, and showcase the folk culture and village style of traditional villages. In addition, it is necessary to further improve the cognitive level of leaders at all levels towards traditional villages, so that frontline managers can understand the basic knowledge of traditional village protection and guide villagers' various construction behaviors.

5.2. Institutional innovation, departmental collaboration, and increased investment in protection funds

At present, policies and measures related to the protection and construction of traditional villages are constantly being improved, providing policy guarantees for various departments to protect cultural resources and revitalize village development. In the future construction of traditional village protection in Gannan area, the government should play a leading role, coordinate with major departments such as finance, poverty alleviation, urban construction, transportation, culture, tourism, municipal government, and township governments at all levels, innovate the system, actively explore efficient and secure management mechanisms, and coordinate the handling of various problems between traditional village protection and the construction of ecological civilization well-off villages. At the same time, actively seek support from various special funds, utilize various public welfare platforms, and explore financing channels through multiple channels such as social fundraising. In the specific implementation process, in response to the actual situation of traditional

villages in implementing ecological civilization and building a moderately prosperous village, the cultural department can take the lead in formulating specific construction and implementation plans, reasonably determining the overall layout, functional positioning, and development direction of traditional villages, highlighting foresight and scientificity, coordinating the construction projects of various departments, and from the perspective of cultural heritage protection, formulating construction models that are conducive to village protection, that is, achieving institutional and mechanism innovation, departmental cooperation, and improving the utilization rate of various construction funds.

5.3. Clarify the stakeholders and establish a supervision mechanism

The traditional villages in Gannan region are rich in historical and cultural resources, which can be used to actively develop rural tourism and continuously improve the living standards of villagers. At the same time, the internal social order of the village is orderly, and the next step is to continue to establish a fair and transparent funding management system, establish supervision mechanisms, clarify the interests of various resources, attract more social resources to protect and inherit excellent local culture, and form a virtuous cycle. At the township level, specialized management personnel are appointed with responsibilities assigned to individuals, who are fully responsible for various construction activities related to the protection, management, and resource development of traditional villages. The government grants the cultural relics department the right and obligation to conduct supervision and inspection. Encourage the establishment of village rules and regulations within villages, reflecting the protection measures and requirements of traditional villages, so as to comprehensively guide the scientific and orderly development of the protection and construction of traditional villages in the context of ecological and well-off village construction in Gannan area. Guiding and encouraging villagers to repair and transform traditional dwellings through funding, policy support, and other means, allowing individual villagers, village collectives, or cooperation with enterprises to carry out protective development of traditional village resources, achieving sustainable use of resources. Ensure stable and harmonious interactive relationships among various stakeholders, establish and improve supervision mechanisms, and ensure the sustainable development of traditional villages.

5.4. Fully mobilize all sectors of society and actively attract and cultivate talents

In recent years, local governments have vigorously carried out the protection and development of traditional villages, and the intangible cultural heritage of many traditional villages has been restored and protected. However, the problem of talent shortage has not been fully solved. Therefore, relevant departments should continue to strengthen the management of rural migrant population, attract talents to return,

and actively cultivate local talents. On the one hand, give full play to the leading and exemplary role of Xinxiang talents. Encourage talents who have gone out to study or work to return to their hometowns for employment and entrepreneurship, form new talent teams, or arrange for respected elders, village cadres, party members, and other groups in the village to be responsible for village cultural construction, infrastructure construction, talent system construction, etc., gradually taking on the responsibility of village development. On the other hand, fully mobilize the enthusiasm of all sectors of society and integrate the advantageous resources of all parties. For example, professionals are invited to carry out Internet newcomer training activities, Internet technology sharing meetings, etc. in the village to encourage the left behind young people to actively participate in training, so as to cultivate local talents and provide talent support for the protection and development of traditional villages.

5.5. Adhere to the concept of ecological livability and strengthen ecological environment protection

Ecological livability is an inherent requirement for rural revitalization. Therefore, in the protection and development of traditional villages, attention should be paid to strengthening environmental protection and ecological restoration work. On the one hand, top-level design and detailed planning should be done for the spatial texture of traditional villages, and natural materials should be obtained as much as possible from the village to build traditional houses and streets, avoiding the use of destructive materials such as reinforced concrete. From the perspective of rural ecology, the corridors, pavilions, activity areas, and leisure areas of streets and alleys should be designed to reduce the possibility of damaging the traditional village environment from a planning perspective. On the other hand, strengthening pollution control and implementing classified management. Focus on rectifying areas with high population mobility and density, such as water source protection zones and tourist scenic spots, and concentrate on carrying out sewage and white pollution control in these areas, arranging dedicated personnel for supervision. In addition, it is necessary to improve the centralized garbage management system. We can establish a one-stop rural household waste collection and transportation station, create a number of demonstration ecological villages at the township level, actively promote the comprehensive disposal and utilization facilities of organic waste, and create a green, healthy, and sustainable rural landscape.

5.6 Improve infrastructure construction and enhance the production and living environment

To promote the protection and development of traditional villages, it is necessary to improve infrastructure construction as soon as possible, strengthen the overall spatial planning and design layout of villages. On the one hand, we will protect the traditional village ecosystem, reasonably control the intensity of natural resource uti-

lization, and coordinate the promotion of green operation, maintenance management, and energy-saving renovation of buildings. When planning and constructing village dwellings and streets, the concept of green space design can be referenced to integrate green and ecological elements into the artificial ecological landscape areas of dwellings and streets, creating a new pattern that combines modernization and ecologicalization. On the other hand, promoting the development and utilization of clean energy in traditional villages, designing drainage and waterproof pipelines in public areas; Carry out greening and beautification actions along the roads in the village to further improve the production and living environment of traditional villages.

6. Conclusion

As an important part of rural China, traditional villages are important carriers and spiritual homes of excellent traditional culture of the Chinese nation, with high cultural and scientific value. The protection and development of traditional villages is an important part of rural revitalization. Effective protection and development of traditional villages are of great significance for the smooth implementation of rural revitalization strategies.

Under the comprehensive influence of regional environment, historical culture, and socio-economic factors, traditional villages in Gannan Prefecture have formed unique architectural features. This paper takes Niba Village as a case study and analyzes that traditional villages in the region need further attention, combined with protection and utilization, to fully realize their unique value. Therefore, relevant departments should continuously strengthen the protection and development of traditional villages, handle the relationship between the protection and development of traditional villages, and balance development while preserving the authenticity and integrity of traditional villages.

This study not only meets the need to protect the diversity of Chinese culture, but also fills the gap in previous research on traditional villages of ethnic minorities. At the same time, it can lay a certain foundation for exploring the development path of traditional villages in relevant ethnic regions.

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