

Research on the strategies to optimize traditional Korean nationality village residential environment -- Taking the transformation of Chatiao Village in Antu County, Yanbian Korean Nationality Autonomous Prefecture as example

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Abstract. This research is aimed to make an in-depth research into the strategies and methods to protect and develop the residential environment in the villages and towns with minority group characteristics. In the research on the construction mode and optimization strategy of the residential environment of the original residents in Chatiao Village, Antu County, Korean Nationality Autonomous Prefecture, the contents of architecture and planning were used comprehensively with the philosophy of green design, sociology and economics being combined simultaneously to drive the humanistic and economic development in the minority areas at the same time of providing new employment opportunities and a comfortable residential environment for people, thus realizing the complete development of the characteristic villages in Chinese minority areas.

1. Research background and necessity

1.1 Analysis to the background of the research on nationality traditional villages

The Korean nationality is an important part of the minority groups in northern China and is also a typical cross-border nationality. With the modern civilization coming in constantly and due to such reasons as changing in local production and traditional living mode, historic ageing, etc., numerous Korean nationality traditional villages expand disorderly in village space layout, and the infrastructures and public facilities are backward. Under the influence of tourist economy, a lot of houses have been newly built and rebuilt. As a result, new architectures and historic architectures are mixed, and the local style is extremely uncoordinated. At the same time, the natural ecological system is damaged seriously, and the residential environment is faced with a grim situation.

1.2 The necessity for the research on the residential environment of Korean nationality villages

In the process of rapid urbanization, the rural traditional settlement culture, personal connections and social consciousness are subject to the impact of urban culture, and are being integrated and



substituted gradually. Such residential environments as rural geographic space environment, social cultural environment and natural ecological environment, etc. are in a disorder and transformational development state. In future 20 years, the urbanization in China will still maintain a rapid development momentum. The rural residential environment is a residential system in rural area, that is, the organic combination of materials and non-materials required by farmers in production and living, which is a dynamic, complicated and huge system. Under such system, the functional conversion and evolution has its inherent laws. Planning and perfecting the infrastructures and public ancillary facilities in a scientific manner, improving the production and living conditions and taking a way of ecological development are very urgent and important work. [1]

2. The status quo of the residential environment in Chatiao Village, a traditional Korean nationality village

2.1 General introduction to Chatiao Village

Chatiao Village is located in the northeast of Antu County and the place where the Town Government of Shimen Town is located. It is adjacent to Longjing City in the east and adjoins with such two towns as Laotougou and Tianbaoshan in the west, which connects with Mingyue Town in the north and fronts water with hills on the back. All the hills are luxuriously green. The village integrates with nature. The village construction can date back to early 20th century. It is a main village where the population of Changbai Mountain System resides and is also a Korean nationality village which is the largest in scale and the most typical. Its area is around 30 sq. km. The total number of households is 336 and the total population is 1,214, in which the Korean nationality population accounts for 80%. The transportation of Chatiao Village is convenient with rich tourist resources. The traditional industries have certain influential power. The Korean nationality has such humanistic environment advantages as emphasizing education and being open-minded. In 2015, the Party Committee and Government of Antu County determined Shimen Town as a minority group town for key construction in the “13th 5-year Plan” of Antu County. The policy environment is very favorable.

2.2 Problems existing at present:

- (1) The planning is lack of systematicness and unable to be geared to the need of development and construction.
- (2) The architectural style is lack of unified planning, and there is no landmark architecture.
- (3) The public service and infrastructures still need to be further perfected.
- (4) The industrial development is lack of effective promotion.
- (5) The villagers have no belongingness, and they are lack of cultural self-confidence.

3. Strategies to protect and develop the residential environment

3.1 The protection of the traditional architectural style and the molding of characteristics

3.1.1 General layout

According to the style characteristics of Chatiao Village and the spatial distribution of the environmental elements, the general village style is generalized as such a style characteristic structure as “two hills and two waters, one belt and four zones”. The “two hills” are Wuhu Hill and Beijiazi Hill; the “two waters” are Buerhatong River and Zhongping River; the “one belt” is the ethnic and folk custom demonstration belt on both sides of No. 302 national road in Chatiao Village; the “four zones” are folk culture experiencing zone, characteristic commercial service zone, hill and water landscape zone and ecological agriculture sightseeing zone.

3.1.2 Zone positioning

Folk culture experiencing zone - This zone is renovated and repaired on basis of the original architectures with decoration being made mainly by using Korean nationality architectural tones and traditional materials (wood, gray tile, wall brick, etc.). Hotel, shopping store, guesthouse, folk handicraft demonstration center, tourist reception center, etc. are focally built. It is a kernel and key zone planned by Chatiao Village, and mainly consists of soybean paste industrial park, Korean nationality traditional residence demonstration and cultural plaza. The planning generally protects the traditional pattern and style, historic streets and lanes, nodes and historic environmental elements. As a result, the general style is coordinated and orderly with humanistic characteristics being shown. The historic landscape of the original settlement as well as the characteristic industrial landscape of a Korean nationality village is focally showcased. [2]

Characteristic commercial service zone – It covers characteristic food and beverage, guesthouse, happy farmhouse, characteristic commodity transaction market, etc. with nationality characteristics. It mainly satisfies the tourist reception and service function, and guides villagers to repair houses simply to intensify the general appearance style and internal nationality culture elements.

Water and hill landscape zone – It is planned to protect the original terrain and landform, repair the river bank, increase the brightening and leisure atmosphere and showcase the natural appearance of hilly village, river and field in combination with forest ecological tourism.

Ecological agricultural sightseeing zone - On a large area of farmland and hills with a gentle terrain, it is planned to plant rice, vegetables, melons and fruits and economic crops, arrange picking park and process farm products to create an ecological agriculture landscape integrating ecological growing, processing, sightseeing and experiencing in combination with ecological agriculture sightseeing and tourism.

3.1.3 Focal planning for the kernel zone

Soybean paste culture industrial park - It is an important folk culture demonstration zone of Chatiao Village, and is a main scenic zone to receive tourists in future. Based on the existing “Korean Soybean Paste Park” and taking the soybean paste production and processing process as the basic chain, a general planning and layout is made to the zone to build cultural market concept.

Korean nationality custom street - Renovation and repair is made on basis of the original architectures on both sides of No. 302 national road with decoration being made mainly by using Korean nationality architectural tones and traditional materials (wood, gray tile, wall brick, etc.). Hotel, shopping store, guesthouse, folk handicraft demonstration center, tourist reception center, etc. are built focally.

Traditional residence protection and renovation - In the planning, classified protection and renovation is made to the architectures in the village according to the historic value, preservation conditions and style characteristics with such measures as original appearance protection, repair, rectification, renovation, removal, etc. being taken. The utilization of courtyard enclosure walls, indoor spaces, courtyard greening layout and internal street and lane planning and design are intensified to mould a characteristic community being “open in large space and close in local space”.

3.1.4 Environmental rectification

A comprehensive rectification is made to the external environment of Chatiao Village, including such important nodes as street and lane road surfaces, road greening, courtyard environment, civic pipelines, village and town entrance and exit, etc. Environmental facility furniture is increased. Through environmental beautification and brightening, local flavor and nostalgia is reserved simultaneously, the daily landscape and hometown tune of original settlement is highlighted, and village landscape urbanization and duplication is avoided. For example, for street and lane road surfaces, square paving, construction materials, etc., the principle of using indigenous raw materials is taken by using local wood, stone, red brick, adobe wall, etc. For tree species, the landscapes in four seasons and vision height difference are mainly considered. The local tree species are selected and

used in an in-situ manner with combination and collocation being strengthened focally to show the landscape characteristics of the Korean nationality villages in Changbai Mountain area. [3]

3.2 Korean nationality culture protection and inheritance

Culture is the part that can be perceived most easily in a village as well as an embodiment of the social belief and customs thereof. As the most habitual and real lifestyle of villagers, it embodies the “blood vessel” of villages and towns in a centralized manner, and is also the most important content to be concerned most in the residential environment construction of villages. Through investigation and classification to the history and humanity of Chatiao Village, it is generalized into spiritual belief culture space, cultural education space and daily production and living space. At the same time, pertinent space protection strategies are made, that is, to achieve the purpose of rational protection and utilization of culture space and inheritance of village and town history and culture through such ways as remodeling, repair to the original conditions, scene reduction, ritual reproduction, etc. [4]

3.2.1 Molding a symbolic humanistic landscape

In 1964, “Antu Man” unearthed on Shimen Hill in Shimen Town is the ancestor creating the heaven and earth in Changbai area that was discovered so far, and is also one of the earliest ancient human beings in northeast China. Shimen Town becomes the town where the human history and culture of Changbai Mountain began. This historic origin is full of cultural imagination. In the cultural furniture, landscapes and sculptures planned for towns and villages, the image of “Antu Man” is to be remolded indifferently in the long cultural corridor to pull the thought of tourists to the prehistoric times long ago.

3.2.2 Repair to the original conditions

In the planning, such measures as protection, repair and internal function improvement are taken to protect and utilize the traditional architectures. In the process of repair, the original architectural appearance and the historic information left on the architectures are to be kept as practical as possible, such as material, structure, historic member, etc. They are to be renovated into places for traditional handicraft processing, tourist experiencing activities, etc. to extend the residential function and expand the functions of commerce, tourism and cultural activities.

3.2.3 Scene reduction

In order to give play to the demonstration function of cultural space, it is planned to guide villagers to collect clan pedigrees relating to towns and villages as well as tools and implements for production and living activities through historic scene reduction, and open up a folk culture demonstration hall to display them indoors. Simultaneously, the scenes of daily production and living of the residents in towns and villages is demonstrated by way of sculpture, fresco, photo, picture, physical object, etc., such as farming life, wedding ceremony, sacrificial rituals, Korean nationality clothes, the preparation process of such characteristic food as Korean nationality pickled vegetables, glutinous rice cake, etc. [5]

3.2.4 Ritual reproduction

Such festivals and ceremonies as Korean nationality traditional wedding ceremony, the rituals for congratulation to elderly people, etc. are set up focally to allow the reproduction of ancient ceremonies and customs. Through the ritual activities, the traditional rituals and customs can be inherited among villagers from generation to generation. On the other hand, tourists are allowed to participate in and experience them to enrich their experience, which is favorable to the dissemination and inheritance of Korean nationality folk culture.

3.2.5 Culture activity organization

The masses are organized to compose and rehearse themselves such Korean nationality traditional dances as fan dance, dance of water on the top of head, Xiangmao dance, long drum dance, Korean

nationality folk percussion music, drum dance, etc. In addition, the villagers are actively organized and motivated to participate in physical exercises as well as song and dance performances, so as to strengthen the scale of such cultural bodies as dance team, fitness team, etc. and make their performances become an important item in rural tour.

3.2.6 Cultural facilities perfection

Such symbolic public architectures embodying both nationality and local characteristics in a centralized manner are built focally, such as village gate, cultural square, long cultural corridor, etc. The activity spaces and places are provided for villagers and tourists to hold group activities, civilized rituals, theatrical performances, exercises and fitness, etc.

3.2.7 Cultural product inheritance and innovation

The development of village and town cultural products mainly surrounds the cultural derivatives with the tourist industry as the dominant part and relating to the village and town culture as well as tourist innovation culture. The types of cultural products are expanded from such aspects as theatrical performance and traditional and tourist handicrafts to enrich the connotations and achieve the purpose of cultural promulgation and influence expansion.

3.3 Positioning and development of characteristic industries

3.3.1 Industrial positioning

A new type of village and town industrial structure that is harmonious and can make sustainable development is created by taking tourism as the traction and characteristic industrial upgrading as internal kernel, so as to promote population backflow through industrial development. Rich agricultural resources, nationality culture and tourism resources in Shimen Town and such advantages as being close to the downtown area and convenient in transportation are sufficiently used to promote the transformation and upgrade of the traditional agriculture and forestry through developing folk culture tour, ecological agriculture sightseeing and hilly village leisure tour, so as to achieve the purpose of increasing the income of residents, keeping the residents, attracting those going outside to return for business startup and activate the vigor and vitality of villages and towns.

3.3.2 Industrial layout

The industrial plan follows the guiding thought of “one kernel and two wings”, and such an industrial spatial structure as “one belt and four stretches” is determined. “One kernel and two wings” means as follows: the development of rural tourism is taken as the kernel, and “the ecological agriculture represented by high-quality organic rice” and “the soybean paste industry with typical cultural characteristics of Korean nationality traditional food culture” are regarded as two wings. “One belt” means taking the commercial street with folk customs as the basic economic belt for commercial service industry. “Four stretches” represents such four functional stretches as Korean nationality folk culture zone, ecological sightseeing and agricultural zone, waterside leisure and sightseeing zone and Wuhu Hill ecological tourist zone. [6]

3.3.3 Nurturing of characteristic industries

- (1) Stereoscopic ecological agriculture;
- (2) Soybean paste cultural industry;
- (3) Characteristic tourism.

4 Conclusion

In one word, the construction of rural residential environment at the contemporary era is a dynamic and complicated system. Due to the complexity and specialness therein, no uniform example can be followed. As an important integral part of Chinese traditional culture and regional diversity, the Korean nationality villages have a structure system with unique features. By making overall

construction and planning for Chatiao Village, Shimen Town and taking a series of measures like improvement of the structure spaces of villages, inheritance of traditional nationality culture, orientation of industrial development, etc., the strategy of overall development and itemized promotion and combination of governmental promotion with market operation is thus formed. In the research course, not only the contents of architecture, planning and ecological design are applied, but the philosophies in anthropology, sociology and economics are also combined to make multi-disciplinary focal study. During the special period of social transformation and the critical stage of building a well-off society comprehensively, emphasizing the protection and revitalization of the residential environment of traditional villages in nationality areas and further exploring the construction mode and optimization strategy to be geared to the regional advantage of Korean nationality and embody the rural residential environment with characteristics has a very important real significance.

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