Research on the Beautiful Rural Design of Koreans – Taking the rural planning of Jing Xin Town in Hunchun as an example

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Abstract. As the acceleration of China’s growth continues, both urban and rural areas of China have received comprehensive planning in its land management. China's construction industry continues to bloom into a new era. With the unique historical and cultural background of the Korean people, China’s Yanbian prefecture has become its own individual region brought forth by Korean traditional culture. As a cross-border ethnic area, making rural planning and designs without losing the historical distinct cultural characteristics of the area has become a key issue that requires focused planning in the Northeast.

1. Introduction
The 18th National Congress of the Communist Party of China proposed the "Beautiful China" plan to build an ecological civilization. In order to realize the sustainable development of the Chinese nation, the direction of urban and rural planning development was clarified. After the construction implementations, there have been many cases of beautiful Chinese villages standing out. In some urban and rural areas with strong traditional culture, deeply exploring the local culture allows overall planning and design of the construction to preserve historical culture. This is very important for the construction of beautiful Chinese villages.

2. The significance of Hunchun development and rural construction
Hunchun City, Yanbian Korean Autonomous Prefecture of Jilin Province has its own strategic position. In 1992, the United Nations developed the International Cooperation Project for the Tumen River Region, this given policy was extremely favorable and allowed Hunchun to prosper. However, due to factors such as the slowdown in history and the development of neighboring countries, the development of Hunchun hasn’t been smooth. In the second half of 1993, Hunchun entered a period of stability. In 2012, the Tumen River regional cooperation and development became a national strategy. In the past 15 years, some economic and social management authorities of the prefecture-level city government of Hunchun City have been given. Under the dawn of the new era, Hunchun City has fully utilized the five advantages of “resources, location, ecology, policy and humanities” and made every effort to complete reformations and open up. China's regional revitalization plan includes various tasks, ethnic minority regional policies, the opening of high speed train rails, and so on have confirmed that...
Hunchun is moving forward in a bright future. Looking into the future, as a city with Korean characteristics, Hunchun City’s beautiful rural construction is a key demonstration area. The blueprint design must have the inheritance of Korean culture due to its great impact on rural planning.

3. Hunchun rural planning goals and principles
Hunchun’s rural planning and principles must be reasonably adjusted and refine the allocation of land resources available. All construction planning areas are to be comfortable, safe, and beautiful while maintaining organized internal and external traffic. These basic steps can reflect the Korean folklore characteristics of the open development of Hunchun. This will become the key guiding role of planning and design in urban construction and development. The role is to ensure that the social, economic, and construction activities of Hunchun City can be carried out in an efficient, orderly and stable manner.

The "Three Principles" of architecture proposed by Vitruvius's book "Architectural Ten": application, safety and beauty. The same applies to the planning of Hunchun. In addition to meeting these three items, Hunchun plans to follow four principles:

3.1. People-oriented principle
Due to the various types of land around the core area, it is necessary to arrange functional land.

3.2. The Principle of Unity
The traffic in the planning area should relate to the surrounding villagers' living areas and method of transportation.

3.3. Functional Compound Principle
Considering the balance of the complexity and elasticity of each plot, it pays attention to the integration of rural architecture and nature, showing the charm of the beautiful countryside.

3.4. Ecological Principles
With the help of the mountains and making full use of the original river channel advantages of Hunchun. We will create landscapes and villages, respect nature, not blindly demolish large buildings, pursue original ecology, reduce manual intervention, adapt to local conditions, create a pastoral atmosphere in the plains, and show the mountain village style in the hillside areas. Rural architecture mostly uses Korean traditional materials to interpret national characteristics, eliminate urbanization trends, and preserve the natural atmosphere of the countryside.

4. Overview of the current situation of Jilin Hunchun City and the previous planning summary

4.1. Natural Resources
Region: Hunchun City is located in the eastern part of Jilin Province, at the eastern end of the Yanbian Korean Autonomous Prefecture, downstream of the Tumen River, and close to the Sea of Japan. It is the center of concentration in Northeast Asia with a total area of 5145.38 square kilometers.

Water: Hunchun City is rich in water resources and has a dense river network. The famous Tumen River has a total length of 525 kilometers and has seven main tributaries.

Tourism: Hunchun City has a unique geographical location, adjacent to North Korea and Russia, and has a national anti-traditional scenic spot with “three countries at a glance”.

Economy: GDP is the core indicator of the national accounts, and an important indicator to measure the economics of a country. The growth rate of Hunchun and Gongzhuling ranks first in the province. The high-speed growth data is inseparable from the rapid development of various cities and states. Under the favorable policy, the implementation of Changjitu strategy, relying on location advantages, business advantages, and tourism advantages, the economy is prospering at a rapid rate.
Industry: Agriculture, forestry, animal husbandry, and fishery have considerable output value. The agricultural structure is mainly based on planting. In the industrial sector, state-owned enterprises are declining, while the shareholding system, foreign investment, and Hong Kong, Macao and Taiwanese investment enterprises increase.

4.2. Residential lives
Overview of population and urbanization level: The ratio of non-agricultural population to agricultural population is about 7:3, and the ratio of Han, Korean, and Manchu is about 5:4:1.

| Year | Population | Rural population | Urban population | Urbanization level |
|------|------------|------------------|-----------------|-------------------|
|      | Total      | Growth           | Total           | Growth            |                  |
|      | Total      | Growth           | Total           | Growth            |                  |
|      | Total      | Growth           | Total           | Growth            |                  |
| 2008 | 211988     | 1.01%            | 82970           | -10.33%           | 175218           | 8.95%            | 82.65%           |
| 2010 | 214319     | 1.10%            | 79693           | -4.11%            | 178966           | 2.14%            | 83.5%            |
| 2012 | 215666     | 0.63%            | 82600           | 3.52%             | 181472           | 1.40%            | 84.14%           |
| 2014 | 217671     | 0.93%            | 90451           | 8.68%             | 183947           | 1.36%            | 84.51%           |
| 2016 | 221340     | 1.69%            | 90362           | -0.10%            | 187028           | 1.67%            | 84.5%            |

Hunchun area is the charming capital of “Three countries blending and exotic customs”. The income of urban and rural residents has increased steadily, social security has been further strengthened, and labor and employment have maintained steady growth. The ratio of zero-employment households has reached 100%, and people’s daily lives are diverse. There are forests and snow fields in the mountains. The Koreans can sing and dance, forming a unique traditional folk custom. Whenever there is a dance, there are many Korean folklore dances with distinctive characteristics.

4.3. Traffic Conditions
Railways and highways are the external methods of transportation. The railway currently does not have international passenger flights. As a result, the density of the road network is too low, forming a layout that is basically adapted to the requirements of modern transportation layouts.

Comprehensive evaluation of the status quo of Hunchun, whether it is location, transportation, landscape, land use, infrastructure has its advantages but also problems and constraints.

Table 2. Hunchun planning process

| City nature | Land scale | Population scale | Type of industry | Development layout |
|-------------|------------|-----------------|-----------------|-------------------|
| Regional Center for the International Region in the Lower Reaches of the Tumen River Cities | Vision, Urban Construction Land 100km² | Vision, 700-800,000 people | Energy chemical industry, mineral processing industry, new building materials industry, green food industry | “One Center, Four Bases” |
| | The core area of Tumen River Border Free Trade Area; Tumen River downstream international regional center city | In 2020, 42.17 km² of urban construction land | About 500 thousand people in 2020 | Electronic Information Industry; New Materials and Mineral Products Processing Industry; Wood Products Fine Processing Industry; High-end Textile and Garment Industry | North Bank of Hunchun River: Residence, Management, Service, Culture; South Bank of Hunchun River: South Center of Hunchun City |
5. Korean traditional folk culture and characteristic architecture

5.1. Korean profile, origin, development and distribution
China has 56 ethnic groups. Protecting the traditional folklore left by ethnic minorities is our common responsibility. The Korean ethnic group is a cross-border ethnic group and one of the major ethnic groups in East Asia. It is mainly concentrated in the Korean Peninsula, Northeast China, and Russia. Many Korean residents are in Yanbian Korean Autonomous Prefecture, Jilin Province, China.

5.2. Korean traditional etiquette and folk culture
Today, traditional Korean folk culture has become one of the traditional cultures of China. To Koreans, traditional etiquette is very strong and heavily implied. Politeness, respect for teachers, respect for the elderly, integrity, generosity, and especially the festivals for the elderly and children. Korean folk culture has many distinctive features: singing and dancing culture, self-made kimchi, border scenery, Changbai Mountain Scenic Area, Arirang Square, Jindal's story and so on. In the planning and design, by taking advantage of the resources of these traditional folk cultures, Yanbian will inevitably need to design and develop folk custom villages, cultural entertainment venues, song and dance theatres and other projects with folk characteristics, so that the travellers who come here will feel the "three countries blending, exotic customs" of Hunchun City.

6. Exploration on the Planning of Rural Characteristic Construction in Jing Xin Town
Jing Xin Town is located in the southeast of Hunchun, about 70 kilometers from the city. Jing Xin Town is the striker of opening up to the outside world in Jilin Province and is classified as one of the national key towns. It has terrific geographical location, possesses distinctive advantages such as characteristic culture, tourist attractions, port resources, and development and opening up of Changjiitu. The “going out” strategy put forward by the 18th National Congress puts Jing Xin Town in the stage of development and opening up. In addition to the advantages of cooperation in the Tumen River region, the prospect of Jing Xin Town is beautiful. It has 14 administrative villages including Erdaobu, Jintang, Jiushaping, Huanhe, Fangchuan, Liudao, Sidao, Lutian, Huilong, Glass, Chaoyang, Xijiashan, Daduchuan and Baishi.

6.1. Jing Xin Town Space Layout Planning
Combing the spatial layout is a beautiful country building. Combining the land division and ecological conditions, the structure of “one heart and two rings, functional zone group development” is proposed. While the functional partitions are independent, due to the center'd fix, it is like a series and parallel circuit structure, which makes the extension reach a high balance. It can achieve joint development and mutual promotion.
6.2. Jing Xin Town Road Planning
Construct beautiful rural roads while maintaining a steady flow of traffic is key. Road construction is the basis for the development of a region. Based on the functional division and geographical location of Jing Xin Town, the division of labor has clearly defined the route selection and layout of the roads. The layout avoids traffic interference, properly handling the external and contradictory traffic flow lines, and integrates the components through regional integration. The road network promotes the development and prosperity of the town. The highway has the National Highway 302 and the secondary roads leading to the ports of Changlingzi and Fangchuan. In terms of waterway transportation, Hunchun is located in the core area of the Northeast Asian Economic Circle in the Sea of Japan. In mid-June 2018, the whistle of the “Blue Sky No.1” in North Korea’s Luojin Port was ringing, and a new breakthrough was discovered in the construction of the cross-border land and sea transport route in Hunchun. The diversification of the shipping routes in Jilin Province has been achieved.

6.3. Jing Xin Town Function Planning
The central area is set up with a business district that has beautiful rustic building, divided into functional partitions. Through the introduction of brand-based small-scale commercial projects, as well as the Jing Xin Town Style Bar Street, the Korean Nationality Food Street, and the Korean Nationality Inn, creates a prosperous central area that will open all day long. With catering, handicrafts, entertainment, and leisure as the carrier, it will form a regional cultural tourism destination; it is worth mentioning that the Hanok community highlights the Korean traditional culture. It is divided into four areas: quality residential area, commercial area, Han Feng experience area, and characteristic courtyard. Being here will let you experience Korean culture and one-stop tourism. The planning strives to reach the expectations of the travellers who travel here to have a comfortable living environment.

6.4. Respect for the architectural style planning
Jing Xin Town is located in the unique Korean traditional area with beautiful rural architectural construction. The layout and main style of the buildings are inclined to the Korean style, and are applied to all aspects. Whether it is colour, style or façade, use local elements as much as possible. In addition to retaining the charm of the town itself, it has transformed from the traditional Korean style of the enclosed and sloping roof to the modern style, with Han, Chao, Mongolian, Manchu, Russian and other ethnic characteristics as the carrier, reflecting the local tradition of multi-integration. Culture forms a regional cultural tourism destination and can enhance the local people’s sense of belonging. The application of the sense of hierarchy makes the town of Jing Xin not only conform to the traditional Korean rural texture, but also conform to the development trend of architectural style.

Figure 3. The village of Jing Xin town
Figure 4. Jing Xin Town
7. The Successful Reasons for the Construction of Beautiful Rural Areas in Hunchun City

7.1. Rational use of the wetland

It is believed that the main wetland area is 5874 hectares, including different types such as the Qianwu wetland, the Lake White Wetland, wetland along the Yangtze River, Meadow wetland, and artificial wetland. There are precious salmon in the area, wild rose of Quaternary Palaeozoic plants, aquatic economic crops such as reeds, and birds such as sea eagle and red-crowned crane.

We believe that the current wells in the wetlands have not received the attention they deserve. The development of agricultural and reservoirs now takes up some of the wetlands and needs to be rehabilitated and repaired. The wetland has a strong ecological purification effect and is also a paradise for horses. It can be combined with tourism, education, vacation and other tourism functions for related protective development.

7.2. The establishment of a large and complete Korean folk custom garden

In recent years, tourism in Yanbian has developed rapidly, and tourism revenue is second only to the capital cities of Jilin Province. In Hunchun Township, the market advantage has become increasingly prominent. The establishment of a large and complete Korean folk custom park can achieve a win-win situation. On one hand, it can promote economic development, on the other hand, it can inherit the traditional Korean folk culture. The folklore garden must first let the visitors feel the strong Korean characteristics. Although Hunchun is in the place where the three countries blend, it should pay particular attention to the cultural retention of the Korean people. Secondly, the visitor is a guest, and the service must be improved and perfected. There are already many folk villages and small attraction spots, but most of them are for the purpose of profit. Many services, goods, performances and food isn’t standard. The Yanbian area needs a folk custom park with high credibility and good reputation.

8. The Conclusion

Hunchun's beautiful rural planning and design are the basic guarantee for promoting the sustainable development of regional construction, and it has far-reaching significance for the rise of Hunchun. It can be known from the research in this paper that Hunchun has a superior geographical position and makes full use of the characteristic resources of traditional villages and folk villages to effectively promote the construction of rural culture and the expansion of the leisure tourism industry in the village. The pace of urbanization is getting tighter and tighter, by jointly organizing and mobilizing social forces enables establishing a platform for the integration of culture and tourism. Thus, making the “First Oriental Village” with a folklore style of Hunchun move towards a more distinctive development path and creating its own folk custom. Linking cultural and folk resources with modern consumer demand effectively promotes the advancement of Hunchun culture. Tourism and other industries is therefore pushed into further forward development.

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