

The Utilization of Forest Plate in Western Sichuan From the Perspective of Rural Revitalization

--Take "chengdu tianfu peony agricultural sightseeing park project" as an example

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Abstract: This paper explains the opportunities and challenges of using forest-pan in western sichuan under the background of rural revitalization. This paper analyzes the elements and characteristics of forest disk in western Sichuan, the relevant theories, case studies and problems of forest disk utilization. The importance of the utilization of forest plate in western Sichuan in the construction of rural revitalization project was clarified. Based on the typical rural revitalization project -- "Chengdu tianfu peony garden agricultural sightseeing park" project as an example, the design process of the utilization of Sichuan west forest plate in the park was verified to explore the utilization of Sichuan west forest plate in similar projects from the perspective of rural revitalization strategy.

Keywords: Western sichuan forest plate; Rural revitalization; Tianfu peony garden; Agricultural sightseeing park

1. Introduction

The party and the state attach great importance to rural revitalization. Since the 18th national congress of the communist party of China (CPC), the development of rural areas has been given a more prominent position. The report of the 19th national congress of the communist party of China (CPC) put forward for the first time the strategy of rural revitalization. Sichuan west forest plate is the unique farming life form of chengdu plain. Typical forest settlements are mainly distributed in dujiangyan irrigation area of chengdu plain. The agricultural environment in western sichuan formed by the forest-pan and dujiangyan irrigation system is the only agricultural area in the world with a history of more than 2,000 years and still playing a role, which is regulated by artificial technology. Forest plate contains three contents: first, there are forests, namely garden, bamboo forest, forest; The second is the courtyard, which is the building; The third is to have arable land on the periphery. Sichuan has a lot of farmyard by the surrounding tall trees, bamboo forests, rivers and peripheral farmland formed by the forest. Lin pan is the most representative architectural form in chengdu plain. The vitalization of the countryside brings great opportunities to the use of forest in western sichuan. For a long time, due to geographical location, environment, history and other reasons, the west sichuan forest

plate has not been effectively utilized. With the aggravation of urbanization, the west sichuan forest plate is rapidly declining and disappearing, and the resulting negative effects will gradually appear in rural construction [1]. At present, under the background of the strategy of rural revitalization, it has become an important task to promote the protection and utilization of western sichuan forest, how to effectively align the requirements of the rural revitalization project with the actual protection and utilization of sichuan forest, and find the combination point of the two.

Xinchang town, dayi county, chengdu city, where the research project is located, is located in the hinterland of chengdu plain, with abundant forest resources, concentrated distribution and unique characteristics. In horizon strategy of rejuvenating the country, based on the chengdu tianfu peony agriculture sightseeing garden project "as the breakthrough point, focused on the protection and utilization of the western sichuan Lin Pan, hope that through research project nakagawa Westwood plate, using efficient way to practice rural revitalization, and based on the country revitalization project of western sichuan Lin Pan protection and utilization in agriculture demonstration effect.

2. Rural Revitalization Strategy Brings Opportunities and Challenges to Forest Protection and Utilization

The strategy of rural revitalization has brought new opportunities and challenges to the protection and utilization of forest. In order to further promote rural revitalization, sichuan province took the lead in exploring the construction of a county-level planning system for rural revitalization, and clearly proposed that effective utilization of forest in western sichuan is the practice of the planning system for rural revitalization. It is required to change the incompatibility and disconnection between forest-pan in western sichuan and modern agricultural production and modern rural life through protective development, and make forest-pan in western sichuan into a beautiful home where people live in harmony with nature and human beings, so that they can "see the mountains, see the water and stay homesick". Through the study of western sichuan forest plate, Chinese scholars put forward the approaches and viewpoints of its utilization: Yin le and CAI jun analyzed the landscape pattern, traditional architecture and folk culture of pixian county garden town, and explored the sustainable development approach of western sichuan forest plate landscape [2]. Yu xiaoping and wu weina analyzed the development conditions, development status and existing problems of rural tourism in the western sichuan plain, and put forward the development strategies to promote forest plate utilization through rural tourism in the western sichuan plain [3]. Through the combination of forest protection and new rural settlement planning, liu bo and mou jiang believed that a new rural settlement conforming to farmers' new production and life style could be designed accordingly [4]. The above studies theoretically studied the utilization of forest plate in western sichuan from different perspectives, but lacked the support and verification of practical projects. Although the west sichuan forest plate is an important element in the whole planning system of sichuan rural revitalization project, it can be seen from the author's investigation that the development and utilization level of west sichuan forest plate is still in the initial stage. For example, "chengdu qingbaishu agricultural tourism project", "sandaoyan forest village rural revitalization project", etc., the forest involved in the main decentralized use, lack of large-scale, standardized system combing and creating. The utilization of forest disk did not apply the research theory to practical projects, did not achieve the purpose of effective utilization, and is still some distance from the realization of the overall goal of "beautiful sichuan· livable countryside". At present, there are a series of outstanding problems in the combination of industry, ecological environment, landscape, infrastructure and so on. Its utilization is still at the level of government behavior, and the real combination with the

industry required by the rural revitalization is still at the primary stage, not to achieve the full and effective participation of all social resources. Therefore, to truly achieve social, cultural, economic and ecological benefits of the four aspects still need a long process, forest and plate modern ecological, residential, landscape and cultural values have not been fully explored and utilized.

3. The Study and Application of the Planning and Design of Peony Garden in Tianfu

3.1. Project background

"Chengdu tianfu mudanyuan project" is located in xinchang town, dayi county, chengdu city, 2km away from the scenic area of xinchang ancient town, east of chengwenqiong expressway, west of xijiang river. The project is located in a subtropical monsoon climate with four distinct seasons and abundant rainfall. The site is planted with tree seedlings such as peony, osmanthus, acacia, bauhinia, kiwi and other fruit trees, as well as local tree species such as green staves, stinking toons and hemp willows formed along the edge of the field. The total land area of the project is 2798 mu, including agricultural land of 1958 mu, land for collective construction (forest plate) of 787 mu, land for public service facilities of 53 mu. The park has perfect internal road network, gentle terrain, abundant water resources and pleasant climate. The landscape green belt along the river, together with farmland and natural vegetation, constitutes the beautiful rural scenery of western sichuan. The project has obvious geographical advantages, good climate and natural conditions.

3.2. Investigation and analysis of forest resources in western sichuan in the park

There are 22 large and small forest disks scattered in the park, and most of the forest forests, water system and residential buildings in western sichuan have retained the three circles and forms intact, and villagers live in them. Among them, there are 3 large forest dishes with a construction area of more than 1000 square meters (such as wang shuibian and alley forest dishes), 8 medium-sized forest dishes with an area of 500-1000 square meters, 9 forest dishes with an area less than 500 square meters, and 2 forest dishes with dilapidated buildings and uninhabited buildings.

4. Project West Sichuan Forest Plate Transformation and Utilization

According to the four evaluation dimensions of forest reserve status, location, size and construction area, the forest reserve in the park was evaluated and used in classification. Based on the existing residential buildings in western sichuan in the forest pan, the damaged buildings were renovated with traditional building materials and

techniques, and were repaired in strict accordance with the architectural features of traditional residential buildings in western sichuan to restore the complete form of the forest pan [5]. Based on the status quo of the project, the west sichuan forest plate in the base is used as the carrier for the layout of the industry to provide support for the supporting services of the project. Therefore, the effective utilization of forest plate in the project is related to the successful industrial layout of the park.

4.1. Visitor center and office area of the park

To the entrance of the landscape avenue with the "zhang nunzi" forest disk renovation, after visitors into the park through the landscape avenue to the visitor center to enter the park. The Lin Pan first keep on using the original sichuan style, transform to meet visitors reception, display and the function of the park office use, without changing Lin Pan building and environment layout, on the basis of modified Lin Pan is divided into two parts, part of the settlement to the visitor center, undertake the reception and display function, the other part of a peaceful settlement for office space, take the park management and business affairs office functions.

4.2. Peony breeding research and development center

This area is located in the north side of the project, which is transformed and utilized by the original "fangshuizhan" forest plate, and has the functions of breeding, cultivation, science education and display. The forest plate is located in the center of the 500-mu peony breeding field in the park, facilitating the breeding of peony varieties and the development of scientific research. There are two large and small courtyards in linpan, and the large courtyard is transformed into a research and development area, which is responsible for the breeding and research of peony varieties. The small courtyard, close to the main road of the park, is transformed into a popular science education exhibition area, which is responsible for displaying the cultivation, growth process and theoretical knowledge of peony flowers to tourists, and understanding and experiencing the public benefit function of peony planting and maintenance process.

4.3. The forest plate of folk life experience

This area depends on "wan alley" forest plate transformation use, forest plate construction area is larger (construction base area of 1080 square meters), traffic conditions are good, circle preservation integrity, surrounded by a bamboo forest, three facing water, quiet space, conditions are more suitable. The existing living space of indigenous people in the forest is complete, and part of the building can be transformed into a forest bed and breakfast, providing tourist accommodation, catering and rest functions. Oil peony is planted in the periphery of the forest, sending out fragrance. Combined with water system and for-

est land, the folk houses in western sichuan create a quiet and elegant leisure environment. Let the tourists taste the tea, eat the rice, live in western sichuan folk houses, experience the characteristics of western sichuan forest life.

4.4. The demonstration area of peony workshop

This area relies on "king laowan" forest plate transformation and utilization, the forest plate is uninhabited, the building is dilapidated but the main body is still alive; The main body of the original building in the forest can be transformed into a workshop for peony essential oil. The workshop is located near the flower field and connected with the commuting road of the park, which facilitates the transportation of raw materials and products for processing peony flowers. The building near the recreation path of the park has been transformed into an ornamental and experience area for the processing of traditional essential oil, where visitors can watch closely and experience the production and processing of peony essential oil. Lin pan for oil around the peony field, can provide raw materials for the workshop, but also with Lin pan echo, the formation of natural plain pastoral landscape.

4.5. Use of other forest in the park

Other woodlands and farmland in the park are well preserved, and the small and medium-sized forest plates still in existence in western sichuan residential buildings are constructed in the form of traditional western sichuan residential buildings by combining the four evaluation dimensions. According to the use of functions, different functional Spaces are divided in the forest tray to break the communication gap between people in modern architecture and give full play to the "convergence" space of traditional residential courtyards in western sichuan. Integrating farmland and rural landscape, the supporting functions such as leisure, catering, accommodation and entertainment themed by peony are implanted into the forest dish, such as: mudan ping, daqian garden, shihuyuan, flower core garden, peony boutique garden, peony farm, happy farm and other landscape nodes for tourists to participate in interactive experience, so as to improve the functional layout of the park.

5. Supporting Design and Ecological Utilization of the Park

The rational transformation and utilization of the site is based on the protection of nature and respect for the environment. In terms of road design, the original natural environment of the site should be protected in accordance with local conditions, and the landscape environment should be combined to meet the functions of the park. In terms of water system renovation, respect local species diversity, establish ecological revetments, and protect plant growth environment and animal habitat; We should

attach importance to the interests of the indigenous people and other parties, implant industries, make full use of forests, and build sustainable rural revitalization projects.

5.1. The design of road landscape in the park

The roads in the park are divided into three levels, namely, vehicular roadway, main road and landscape recreation path. The vehicle lanes are divided into productive roads and the main roads of the park. The productive roads surround the entire periphery of the park and connect with the commuting mouth of the park, and assume the commuting transportation functions of the employees, workshops and various industrial projects in the park. The main road of the park connects with external traffic, entrances and exits, and functional areas, so as to meet the sightseeing and passage functions of walking, sharing bikes, leisure bikes and sightseeing battery cars. The landscape trunk road at the main entrance is the main line of the park. With peony as the main landscape flower, it points out the theme of the park and forms a landscape corridor 50m wide and 312m long. In the center of the landscape avenue, there is a peony pattern pattern landscape with "nine colors" and "ten shapes" as the center, showing nine colors and ten forms of peony. At the end, there is a peony pattern pattern flower bed with a radius of 18m. Local tree species were used as background forest for supporting the landscape effect of pattern pattern flower bed. The landscape recreation path is transformed by the existing country path, passing through forest pan, flower field, forest hut and each node in the park along the way, forming an ecological greenway network with tree-lined paths and beautiful environment. It can satisfy the functions of leisure, fitness, flower watching and scenery appreciation, and enjoy the pastoral scenery of western sichuan (figure 1).



Figure 1. The overall plan of "chengdu tianfu peony agricultural sightseeing park"

5.2. Ecological transformation of water system in the park

Well-watered, four seasons in the park on the northern side of water from ground four weir river, through after irrigation, around the park to the west into the Chu River.

At present, the ditches are constructed by hard revetment and lack the ecological environment between land and water where animals and plants inhabit. The park is densely covered with ditches, but lacks open water surface, which cannot form the effect of water system ecological self-purification and lacks the temperature control effect formed by large-scale water surface. Therefore, the ecological transformation of the water system in the park and the improvement of environmental benefits in the park are comparatively compared. First, using abundant water resources on site, the main ditches were dug through at the low point of the middle elevation of the park to form a wide water surface spanning the north and south of the park, which can meet the requirements of water ecological purification space and water depth in terms of scale. Secondly, the cement edge of the original irrigation canal is transformed, and ecological revetments are built by means of releasing slope and restoring aquatic plants, so as to form a good landscape effect. Thirdly, at the water source of the park, according to the water system purification process, the mudflat biological habitat, multi-pond ecological wetland purifier, ladder pool filtration and dissolved oxygen and other methods are used to coordinate the three purification steps of natural infiltration, comprehensive purification and water quality stability, so that the water flowing through the park can meet the requirements of three types of water quality. It provides safe contact for tourists, satisfies the hydrophilic function, and also guarantees the irrigation water for peony fields and landscape plants in the park.

5.3. The participation of the original residents in the implementation of the project

In order to realize sustainable development of forest plate utilization, it is necessary to attach importance to the interests of indigenous people in forest plate. They are not only participants in the rural revitalization plan, but also an important part of the agricultural culture display in western sichuan, and they are most impressed by the protection and utilization of forest plate. In the early stage of data collection and site exploration during the planning process, the needs and opinions of indigenous people in forest were collected through household surveys, interviews and other forms. In the utilization of forest plate, the requirements of all parties should be fully combined, and the interests of indigenous people, village committees, management committees and other stakeholders should be widely involved, and Suggestions from relevant stakeholders should be listened to, so as to obtain support from all parties and reduce the resistance to the implementation of the project. In the process of implementation, the aborigines are guided to use their own forest plates, and according to the assessment of forest plates, the buildings with inappropriate features are transformed to restore the traditional folk houses in western

sichuan. The forest plate with management function is optimized and upgraded on the basis of the original industry, and the suitable agricultural and tourism industry is implanted relying on the forest plate as the carrier, such as: rural home stay facility, rural restaurant, residential library, etc.; The original wine workshop in the park is utilized to develop and produce characteristic peony flower wine with peony flower as the raw material. Combined with local bee breeding industry, the production of peony nectar, a traditional way of the agricultural industry combined with the development of the park, industrial interaction between tourism and three three ", "let the aboriginal autonomous or participate in the management, promotes the increase in the income of indigenous people, make the parties share of rural development dividend, drive the development of local economy and promote the protection and utilization of Lin Pan, achieving rural revitalization of the sustainable development.

6. Conclusion

Under the background of rural revitalization, the full utilization of forest in western sichuan is an important factor in the project planning of agricultural parks. Through the field investigation, resource sorting, aboriginal interview, forest evaluation, transformation and utilization design of chengdu "tianfu peony garden agricultural sightseeing park" project, it was found that the forest in western sichuan should be fully utilized. First of all, we should firmly grasp the historical opportunity under the background of rural revitalization, closely follow the policies of rural revitalization, and actively promote the policy support of forest plate utilization in western sichuan. Secondly, in combination with the location characteristics and site status quo of the project location, make full use of existing resources, combine the unified planning and requirements of the park, make good use of the western sichuan forest according to local conditions, and build a distinctive rural tourism project brand. Thirdly, make a

full evaluation of the west sichuan forest plate. Based on the evaluation dimensions of the forest plate, such as its size, location, living condition and integrity, and combining the project's industrial positioning and functional requirements, make reasonable transformation on the premise of protecting the traditional landscape of the west sichuan forest plate, so as to realize the sustainable utilization of the west sichuan forest plate.

7. Acknowledgment

A Project Supported by SiChuan Landscape and Recreation Research Center, 2018 (No.JGYQ2018003) The stage research results of "The academic research on the renewal and practice of Qiliping landscape greenway design method: A case research of Qiliping landscape greenway at Emei hillside."

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