

# Research on the Development of Ferry in Jingning Section of Qianxia Lake

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**Abstract:** The purpose of beautiful Channel ferry landscape design is to provide transportation convenience across the water, improve traffic efficiency, promote regional economic development, facilitate tourism and cultural exchanges. There are many fjords in the Jingning section of Qianxia Lake, which has the characteristics of landscape culture, among which ferry is the characteristic element. With the sustainable operation of Jingning waterway public transport, the function of ferry is gradually disappearing. Therefore, through the basic investigation of the current situation of ferry, the contradiction between it and social development is clarified. The ferry is divided into two types: passenger ferry and freight ferry. The transition process of ferry port can be roughly divided into three stages: development stage, prosperity stage and transformation stage. The three main factors affecting the evolution of ferry port are location factor, economic factor and policy factor.

**Keywords:** Grand Canal of China; National Cultural Park; Construction idea

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## 1. Ferry classification

In modern society, the relationship between port and traffic is getting closer and closer, so it is necessary to manage them comprehensively. According to the different use rights, there are public ferry and special ferry. Public ferry is generally built by the transportation department to meet the needs of inbound and outbound ships berthing and transshipment, as well as the special ferry for enterprises and public institutions to carry goods, etc., and the transportation wharf shall not be open to foreign ships<sup>[1]</sup>. The latter is the most common way of division. The port and navigation Management Office of Jingning She Autonomous County divides the ferry along the Jingning section of Qianxia Lake into passenger ferry and cargo ferry according to its transportation function.

A passenger ferry is a ferry specially designed for passengers to disembark and disembark. The ferry evolved from the various wooden boat crossings that once existed outside the city. Before the advent of ferries, there were still a large number of such wooden ferry crossings in Zhejiang. The existing ferry, including tourists and vehicles, is mainly used for the movement of people or vehicles on both sides of Qianxia Lake. Compared with Bridges, ferry terminals have the advantages of short construction period and low construction cost, but the disadvantage is that the capacity is limited by the carrying capacity of ships<sup>[2]</sup>. The long distance passenger ferry is used for the movement of passengers between cities. Tourist passenger ferry is rising in recent years, mainly used for tourism, with tourists as the main service group. Traditional passenger ferry crossings are mostly ferry crossings. The cargo ferry is mainly used for collecting and distributing goods, promoting trade development and improving logistics efficiency.

The freight ferry is a place for the collection, distribution and distribution of goods, which can gather goods from various places, integrate and distribute them, and improve the logistics efficiency of goods. Freight ferry is the main link of goods circulation, and its construction and operation can improve the efficiency of goods circulation and shorten the time and cost of goods circulation<sup>[3]</sup>.

## 2. Formation of ferry port

The formation of the ferry mainly reflects the historical development of the ferry and the functional transformation of these two elements. By understanding the formation and evolution law and factors of the ferry, master the development trend of the ferry, so as to better carry out the landscape design of the ferry.

### 2.1 Development phase - Freight and passenger development

In the Lishui section of Qianxia Lake, except for Huitou pier, other ferries were basically rebuilt from 2007 to 2008, and the

ferry types are basically public ferries. The ferries built between 2007 and 2014 were mainly for freight and passenger transport. The construction of the ferry during this period was based on the exchange of goods. At this time, water transport sailing tools or rely on human-powered paddling wooden boats, mainly to transport villagers on both sides of the Qianxia Lake villagers for simple passenger transport. During this period, no water bus system was established, which was a spontaneous behavior of villagers based on their needs.

## **2.2 Prosperity stage - Passenger and ferry development**

With the development of land transportation, the ferry on both sides of Qianxia Lake gradually appeared functional decline, and the freight function gradually weakened, leaving only the passenger function. From 2014 to 2015, driven by the tourism craze in She Township of Jingning, the demand for passenger transport became increasingly urgent. Based on Huitou Dock, Lishui Port and Navigation Bureau opened the first water ferry line with Huitou Dock as the water passenger terminal in combination with the original loading and unloading area and passenger station. Ferries on this route can carry up to 2,000 passengers a day. Since the reform of ferry transportation in Jingning County in 2014, part of the pier has been built and improved by delimiting working hours, building ferry houses and improving transportation means, and the number of buses has been increased on the basis of the original passenger ferry.

## **2.3 Transition phase - Exploring new models**

In the future, the flow of people brought by the Qianxia Lake tourism fever will thoroughly drive the development of the beautiful river passenger transport. From 2018 to 2026, Qianxia Lake Scenic Belt (Jingning Section) is predicted to receive an increasing number of tourists year by year. For the arrival of such a large number of tourists, it is particularly important to increase the number of water passenger buses and update the ferry terminal.

The development of passenger transport and vehicle-ferry has brought a certain amount of personnel flow to ferry ports and docks. Internally, it is the daily travel of residents on both sides of Qianxia Lake, and externally, it is a large number of external people brought by the tourism boom in She Township. The ferry and dock will also become a tourist spot with public activity space or culture, in contrast to the traditional ferry is no longer just a transportation property for the villagers on the island. It not only serves the villagers, but also serves as a window for tourists to enter Qianxia Lake, and is an important stop on the shipping sightseeing route. The new mode of the traditional ferry terminal will gradually reflect the development pattern of "transportation + tourism". The cultural value of the space cannot be replaced, and the experience and perception brought to people are equally valuable. The terminal mode that will eventually show up in front of people is more diversified, with diverse functions and complex space, which will definitely make it different from other docks. Become a new public place and transportation hub with tourism vitality.

## **3. Summary of development laws**

The transition from freight ferry to multi-functional passenger ferry is affected by many factors, not only by the local economic development, but also by the needs of residents. Port transportation is one of the important modes of transportation in ancient times, and it has evolved with the development of history. In the early stage of urban development, it not only requires the ferry port to provide cargo handling and transfer functions for cargo ships to berth and dock, which brings economic income to the towns along the waterway, but also needs to serve the surrounding residents. Based on the cultural connotation of the ferry terminal, based on the existing functions, and according to the needs of residents and tourists for passenger transport, the waterway ferry, which combines cultural display with public space and water tourism distribution center, with numerous complex functions, is developed to solve the travel of local residents and foreign tourists.

## **4. Influencing factors of ferry port development**

By combing the historical context of the ferry, the main factors affecting the development of Qianxia Lake beautiful Channel ferry include location factors, economic factors and policy factors.

### **4.1 Location factors**

The construction location of Jingning Ferry bus is located in Jingning She Autonomous County, Lishui City, central Zhejiang Province. It is the main transportation hub connecting Lishui City and Jingning County. The geographical location is superior and the transportation is convenient, which is conducive to the development and expansion of Jingning Ferry bus. The construction location of the ferry is located in the mountainous area, with beautiful natural environment and pleasant climate, which plays a positive role in promoting the passenger flow of Jingning Ferry bus and attracting tourists. Jingning County is one of the cradles of She culture in China, with rich She culture and tourism resources. The construction of the ferry port is conducive to excavating and developing the

tourism resources and the culture of Jingning County, and enhancing the visibility and influence of Jingqianxia Lake. Combining the above factors, it can be seen that the construction of ferry landscape is conducive to the development and growth of Jingning ferry bus, and is also conducive to promoting the development of local economy and tourism.

## 4.2 Economic Factors

Jingning County is one of the key ecological counties supported by Zhejiang Province. Tourism, agriculture, forestry and other industries have developed rapidly, which has an important supporting role for the passenger flow and economic benefits of Jingning Ferry bus. The development of trade and commerce is a major driver of increased productivity, accelerated urban construction and improved quality of life for residents of port areas. The establishment of Qianxia Lake Ferry provides an opportunity for the development of commercial economy, and the commercial activities through the ferry promote the rapid development of the local city, and the function of the ferry is becoming more and more complex. In recent years, the implementation of tourism planning of Qianxia Lake in Jingning will further promote the development of Jingning's economy, and the ferry will become the main channel for the construction of beautiful waterways.

## 4.3 Policy Factors

According to the requirements of the Zhejiang Provincial Department of Transportation "Thousands of Miles beautiful Economic Transportation Corridor creation Document" and the provincial Port and Shipping Bureau "The implementation plan of the Province's port and shipping industry to carry out beautiful waterway creation activities", the spirit of the 14th Provincial Party Congress has been thoroughly implemented, and more than 100 articles with good quality, beautiful environment, excellent service, large drive and strong safety have been created throughout the province. Demonstration projects covering four themes: natural scenery corridor, science and innovation industry corridor, ecological people-enriching corridor and historical and humanistic corridor<sup>[4]</sup>.

## 5. Summary

The formation and evolution of the ferries in Jingning Section of Qianxia Lake, the development history and development trend of ferries are understood, and the distribution of ferries in Meili Channel is briefly expounded. Then the characteristics of ferries in Meili Channel of Qianxia Lake are classified and analyzed. The ferries in Qianxia Lake include four categories of ferries, which can be summarized as passenger ferry and freight ferry. The evolution process of ferry port can be roughly divided into three stages: development stage, prosperity stage and transformation stage. The three main factors affecting the evolution of ferry port are location factor, economic factor and policy factor.

## References:

- [1] Tian Qi, Weng Yuzhan. Located on the bank of the river and integrated into the city -- Chongqing Beibei Sansheng Bus Ferry Service Station [J]. *New Construction*, 2021(04):62-65.
- [2] Li Qin. Research on landscape renewal of "Two Rivers and four Banks" wharf in Chongqing [D]. Chongqing university. 2020. DOI: 10.27670 /, dc nki. Gcqu. 2020.000593
- [3] WANG Qingyuan, Li Nan, Chen Binghong. Development and management of national parks [J]. *Bulletin of Soil and Water Conservation*, 2018, 38(2): 1-6.
- [4] LIU Fucai. Research on Landscape planning and Design of coastal fishing village [D]. Shandong Jianzhu University, 2021.

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