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# Research on the Linkage Mechanism of Departments in the Construction of Aquatic Ecological Civilization: A Case Study of Nanxun, Huzhou, Zhejiang Province

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*Abstract: The report of the Nineteenth National Congress pointed out that in order to persist in the harmonious coexistence of man and nature, we must establish and practice the idea that lucid waters and lush mountains are invaluable assets. Nanxun, Huzhou City, Zhejiang Province, has a vast area of water. In recent years, it has actively carried out the construction of aquatic ecological civilization and established the headquarters of ecological construction. Under the leadership of the headquarters, water resources bureau, environmental protection bureau, development and Reform Commission and other departments cooperated to form a linkage mechanism of water ecological civilization construction departments. Under the original general policy of "five-water co-governance", we have created Zero-direct sewage drainage area, beautiful ecological river channel, and harnessed fishery and aquaculture tail water. We have constantly found problems and solved them, and achieved remarkable results. On the basis of summing up the experience and mode of water ecological civilization construction in Nanxun, it will be popularized throughout the country.*

*Keywords: Departmental linkage mechanism, five-water co-governance, water ecological civilization construction, model summary.*

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## 1. INTRODUCTION

### 1.1 Theory of water ecological civilization construction

1.1.1 Water ecological civilization advocates harmonious coexistence between man and nature. The core of water ecological civilization is "harmony".

It is not comprehensive to interpret the aquatic ecological civilization as "protecting aquatic ecology". The core of the aquatic ecological civilization we advocate is "harmony", which includes harmony between man and nature, man and man, man and society.

1.1.2 Water resources conservation is the most important part in the construction of water ecological civilization.

"Strengthen water source protection and total water use management, promote water recycling, and build a water-saving society." It can be seen that the key work to promote water ecological

civilization is to implement water resources conservation and build a water-saving society. This is the most important thing in the construction of aquatic ecological civilization.

1.1.3 Water ecological protection is the key to the construction of water ecological civilization

A good ecological environment is the fundamental foundation for the sustainable development of human society and economy. Implementing major ecological restoration projects and enhancing the production capacity of ecological products; "Accelerating water conservancy construction and enhancing the capacity of urban and rural flood control, drought and waterlogging drainage"; "Adhering to the principle of common but differentiated responsibilities, fairness and respective capabilities, and actively responding to global climate change with the international community". The direct goal of building ecological civilization is to protect the ecology and environment on which human beings depend [1].

### 1.2 Effectiveness of water ecological civilization construction in nanxun

In recent years, Nanxun District has paid more and more attention to the construction of ecological civilization. Especially since the "five-water co-governance" (sewage control, flood control, drainage, water supply and water saving) was carried out in 2014, the efforts of water pollution control, water environmental protection and water ecological restoration have been increasing, and the crystal Nanxun is reappearing.

Since the Twelfth Five-Year Plan, Nanxun District, through the construction of key small and medium-sized rivers, key counties of small and medium-sized rivers, three rivers, river dredging wheel dredging and other projects, aims to reproduce the hometown of "Crystal" praised by Xu Chi, a famous poet of Nanxun, and takes dredging, ecological control and long-term cleaning as its grasp, comprehensively and comprehensively. Improve the water ecological environment.

The overall results are as follows: 9.06 million square meters of river and lake sediment clearance and 102% of 8.86 million square meters of target; 338.4 kilometers of "Three Rivers" harnessing and 154% of 220 kilometers of target tasks; 3 provincial excellent ecological demonstration channels; and 75% of water quality standards in water functional areas increased from 58% in 2014 to 75% in 2016.

## 2. OMNIDIRECTIONAL ANALYSIS

### 2.1 Macroscopic: research on the linkage mechanism of departments

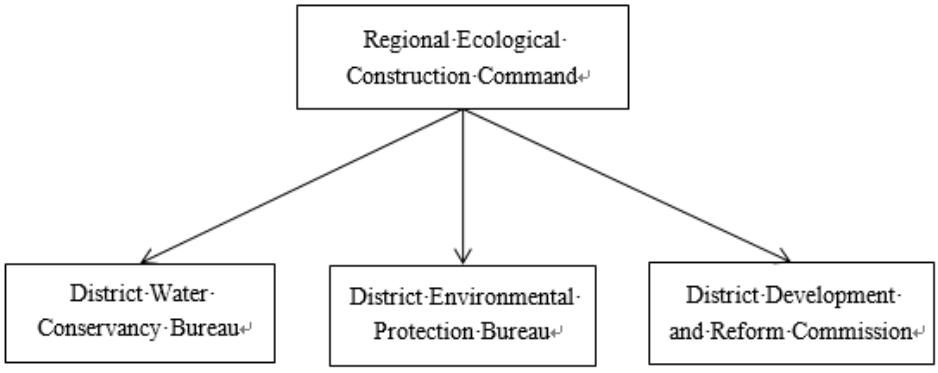


Fig 1. Drawing of Department Linkage Mechanism

2.1.1 Regional ecological construction command

The headquarters of ecological construction mainly plays the leading, mobilizing and supervising roles. The specific work is as follows:

Establishment of the "aquatic environment improvement" group, directly supported by the district leadership group, put forward the concept of "five water co-governance".

From 2014 to 2015, the " Cleaning up three kinds of rivers " campaign was carried out; water pollution was mainly controlled in 2016; small and micro water bodies were treated in 2017, eliminating the inferior five types of water bodies; and in 2018, headwaters were harnessed with the focus on creating "zero direct drainage areas".

On the basis of taking charge of specific work in specific townships and other areas, we should play a leading, mobilizing and supervising role. Among them, we mainly focus on systematic planning, formulate a general action plan, command various departments, prevent the emergence of "Kowloon Water Control" governance chaos, and improve the efficiency of governance as far as possible.

2.1.2 District water conservancy bureau

Regional Water Conservancy Bureau plays an important role in the construction of river bank protection and farmland water conservancy. The work of the Water Conservancy Bureau in this area is divided into two parts: engineering measures and non-engineering measures. On the one hand, engineering measures include standardization of maintenance area regulation, which is to achieve the effect of flood control and drainage by establishing sluice stations; on the other hand, through standardization of base, which is to establish drainage stations to achieve uniform standards of appearance, function and safety. Non-engineering measures include river construction and rural river ecological construction, and summarize the standards of ecological revetment.

2.1.3 District environmental protection bureau

The District Environmental Protection Bureau plays a supervisory and supervisory role in the construction of water ecology. In recent years, under the leadership of the regional ecological construction headquarters, the following work has been carried out:

Sunshine Project: Implementing "Sunshine Project", that is, through the form of documents, stipulates that only two pipelines, drainage and sewage, can be used for newly established industrial enterprises inside and outside the park.

Brush card sewage: "Brush card sewage" is a factory or enterprise, according to their actual production needs, in a specific period of a year to the District Environmental Protection Bureau to apply for sewage discharge, the District Environmental Protection Bureau according to the actual situation to make approval.

Supervising industrial parks: We should focus on the supervision of ecologically related industrial parks, and implement specific measures in supervision. Generally, industrial enterprises are placed in centralized parks, which not only facilitates supervision but also avoids the evasion of individual small and medium-sized enterprises.

2.1.4 District development and reform commission

As the Department in charge of economy, the Development and Reform Commission plays a macro-control role in the construction of water ecology. The main work of the NDRC is to formulate policies, formulate plans and examine and approve, and remarkable results have been achieved.

Policies: Industrial economy "double thousand" projects, 26 strong industrial zones, the amount of investment in equipment to give a certain subsidy, encourage them to expand their investment; after the elimination of small and medium-sized enterprises, the economic losses caused by the owners of enterprises will be compensated to a certain extent.

Making plans: According to the 13th Five-Year Plan, make sub-industry plans and formulate clear requirements.

Examination and approval: There is a progress requirement for the rectification of enterprises in the assessment of grass-roots towns. For example, how many enterprises should be eliminated in a month for "four without five violations". The results of the assessment will be notified to the whole region, which will reverse the enthusiasm of the township government. In terms of project access, strict control should be exercised over the project, and the projects that fail to meet the standards should be cut down directly.

**2.2 Microscopic: project construction**

| Entry Name | Project Brief Introduction | Project Characteristics | Measures For The Construction of Water Ecological Civilization |
|---|---|---|---|
| Nanxun Ancient Town | Nanxun Ancient Town, located in Nanxun District of Huzhou City, is a national 5A scenic spot. The ancient town is composed of Nanshi River, Dongshi River, Xishi River and Baoshan River. There are many rivers crisscrossing the town. Streets and residents distribute along the river. They follow the river and connect with Nandong Street and Nanxi Street in series, forming a cross pattern. Streets and alleys have complete texture and river water system is basically preserved. | 1. To fully tap the environmental factors of the rivers in Nanxun ancient town and harness the rivers from the source; 2. Because the source of Guzhen River is introduced from Taihu Lake, Nanxun Town Waterworks adopt the method of pumping water for water exchange to control the water quality of the river. 3. Combining the water treatment of waterworks with the natural inflow of water sources, the rivers of Nanxun ancient town will be turned into living water, respecting the lifestyle of local residents, and sending personnel to salvage the fallen leaves in the lake by boat. 4. Respect local folkways and customs, preserve traditional architectural culture, and build an aquatic ecosystem that combines with human environment. | 1. Water purification Nanxun Town Waterworks is responsible for river water cleaning. First, the sewage in the river is pumped into the reaction tank, which reacts fully with the water purifier, and then into the sedimentation tank to let the impurities in the water settle down. Finally, the impurities are filtered into the filter tank to get clean water, and then discharged back into the river through the pipeline. This completes a water exchange process. In order to purify the water quality of the river, the sewage in the river has to undergo many water exchange processes. 2, water protection Cleaning up rivers is an important process of water conservation. Every day, the Commissioner salvages the fallen leaves on the lake and finds that the white garbage |

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| | | | is cleaned up in time to keep the river clean and sanitary. Local residents live near the water and rely on the river to govern the river environment. |
| Shicong Town Lobster Base | The project takes the new shrimp-rice symbiosis cultivation model as the core, and takes the Internet, big data and mobile interconnection as the support to build modern agriculture. At present, the project is the largest clear-water lobster breeding base in the province. In the future, it is expected to build 10,000 mu of high-quality super lobster breeding base, and make Shisong clear-water lobster into a well-known brand in the province and even in the whole country. | Shrimp rice symbiosis | Mixed culture of rice and shrimp uses the growth of lobster to form a recyclable ecological chain between paddy fields. Rice planting can reduce the cost of machine cultivation, fertilization in paddy fields, eliminate the use of pesticides, and produce high-quality pollution-free rice. Lobster farming can reduce the incidence, reduce cost management and produce more delicious and high-quality pollution-free lobster. On the basis of ecological construction, great economic benefits are produced. |
| Digang Ancient Village, Hefu Town | Digang Village in Hefu Town is a typical ancient water village in the south of the Yangtze River in the Hangzhou-Jiahu Plain. It was named after reeds growing on both sides of the river and harbor in history and has been known as "fishing Hermitage in Weixi River" since ancient times. Digang is surrounded by water and embraced by streams. It has beautiful environment, rich humanities, numerous ancient buildings, abundant tourism resources and increasingly mature water management. Walking around the town, looking to the left, a river outside the town came into view. The dredger travels over the river and takes away the river sand. At the same time, the Chenghuang River water disperses. Accompanies said that although the river flows through the town, the situation of the pond water in the town is quite the opposite. | Purifying water quality | On the one hand, it can purify water quality, help to block muddy water and deposit sand and rocks; on the other hand, it can form "underwater forest" to provide a habitat for fish in the village water system. |

## 3. SUCCESSFUL EXPERIENCE

### 3.1 The important thought of "two mountains" is an important guideline

Nanxun District adheres to the idea of "two mountains" as the fundamental concept of the construction of water ecological civilization. All departments of the government have unified their ideas and made every effort to explore and practice the construction of water ecological civilization, and achieved positive results. Practice has proved that the important idea of "Two Mountains" is an important guideline for the construction of aquatic ecological civilization, which enables us to deal with the relationship between "economic development" and "ecological protection" more accurately.

### 3.2 Emphasizing the linkage of departments is the fundamental guarantee for the construction of a civilized city with water ecology.

Nanxun District has set up a headquarters for ecological construction, which plays a leading, mobilizing and supervising role on the basis of taking charge of specific work in specific townships and other areas. Among them, we mainly focus on systematic planning, formulate the overall action plan, implement the linkage mechanism between departments, command all departments, prevent the emergence of "water control in Kowloon" governance chaos, and improve the governance efficiency as far as possible.

### 3.3 Innovating system and mechanism is the key to ensure the long-term consolidation of water ecological civilization construction.

In the unremitting practice of pilot exploration, Nanxun District fully realized that the construction of water ecological civilization city must adhere to scientific and technological innovation, strengthen the system supply, and consolidate the effectiveness of water control, so as to achieve the normal and long-term management of rivers and lakes. We should improve the mechanism of "green evaluation" for cadres by establishing the guidance of excellent cadres'achievements through ecological assessment. At present, the content of ecological civilization construction accounts for 29% of the city's assessment of county Party and government performance, which provides a strong guarantee for promoting the pilot construction of aquatic ecological civilization [2].

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## REFERENCES

[1] Qiting, Zuo, “Discussion on Several Key Issues in the Construction of Water Eco-civilization”, China Water Conservancy, 2013.4, 1-6.

[2] Sanxiong, Qian, “Implementing the Important Thought of ‘Two Mountains’and Constructing the Pilot City of National Aquatic Ecological Civilization”, Special Issue on Pilot Project of Water Eco-civilization City Construction, 2017.21, 41-43.