

Research Paper

Exploration and practice of formulating strategic planning for rural revitalization in the Shanghai metropolitan area

—take the rural revitalization of Jinxi town in Kunshan as an example

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Abstract

China's urban and rural development has entered a new stage of comprehensive transformation. The advent of the era of metropolitan development and the strategy of Rural Revitalization are two important national strategic backgrounds of this study. As the highest urbanization rate in Southern Jiangsu, rural and urban development needs synchronous resonance. Rural areas, as an important role in the integration of the Yangtze River Delta and the development of Shanghai Metropolitan Area, play an important role in regional cohesion and complementary functions, and are an important part in the overall construction of the metropolitan area. Jinxi Town is located in the southern end of Jiangsu Province, bordering Qingpu District of Shanghai, and between Suzhou and Shanghai. In ancient China, Jinxi was a traditional town of fish and rice and water culture. During the period of reform and opening-up, Jinxi worked closely with surrounding cities to create a brilliant chapter of "Sunan Model" and "Kunshan Model". In the new stage of development, Jinxi Town shoulders the heavy responsibility of more ecological functions and reduction of construction land indicators. It is not only more responsible for ensuring food production safety and protecting ecological functions, but also more demanding for rural revitalization. It is also more urgent to study its development path and strategy. Firstly, this paper takes Jinxi's contemporary mission as the starting point, secondly, through the analysis of Jinxi's function orientation, population, industry and space, and then puts forward the general strategic requirements of Rural Revitalization according to these four aspects. Thirdly, it demonstrates several different types of villages in Jinxi town, respectively. The cases of upgrading agriculture, industrial integration and development, demonstration of rural community and industrial retreat to build Jinxi Town to revitalize villages in the countryside. Finally, through the follow-up revision and improvement of planning formulation, to help the effective implementation of Jinxi Town's Rural Revitalization strategic planning.

Through this study on the Rural Revitalization of Jinxi Town, on the one hand, it comprehensively implements the national deployment and the task of Jiangsu as a benchmark; on the other hand, it earnestly follows the law of rural self-development, and in the theoretical category of regional economy, it is based on the development of metropolitan area and the background of Rural Revitalization era, with Chinese characteristics, Shanghai. The road of Rural Revitalization in metropolitan area. At the same time, this paper expects to provide ideas and

methods for the compilation of strategic planning for Rural Revitalization in metropolitan areas.

Keywords

rural revitalization, Shanghai metropolitan area, Kunshan Jinxi

1. Basic overview

Jinxi is in the Core Hinterland of Yangtze River Delta Metropolitan Circle——Shanghai Metropolitan Circle, surrounding Dian Shanhu Strategic Cooperative Zone. As an important role in the integration development of the Yangtze River Delta and the development of Shanghai Metropolitan Area, rural areas play an important role in linking up and complementing each other's functions. They are also an important part in promoting the overall construction of the Metropolitan Area.

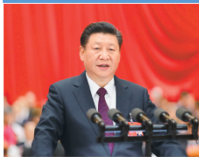
Therefore, on the basis of clarifying the future development direction of Jinxi, how to strengthen the regional interaction and connection with the metropolitan area and strengthen the integration of urban and rural areas is of great significance for activating the vitality of the countryside, promoting the realization of the goal of eliminating urban-rural dualization in the metropolitan area, and how to take the step of Jinxi rural revitalization.



Figure 1: Location Map of Jinxi Town

"Implementing the Strategy of Vitalizing the Rural Areas" ——Integration of urban and rural development

2017.10——The report of the Nineteenth National Congress of the Communist Party of China put forward for the first time "the strategy of rural revitalization"



Seven National Strategies : Revitalizing the Country by Science and Education, Strengthening the Country by Talents, Innovation-Driven Development, **Rural Revitalization**, **Regional Harmonious Development**, Sustainable Development and Civil-Military Integration

Rural Revitalization :
—— Adhere to the Priority of Agricultural and Rural Development
—— General requirements: **thriving industry, livable ecology, civilized rural style, effective governance, rich life**
—— Establishing and Perfecting the System, Mechanism and Policy System of Urban-Rural Integration Development
—— Accelerating the Modernization of Agriculture and Rural Areas

2018.3——The report of the 13th National People's Congress once again emphasizes "vigorously implementing the strategy of rural revitalization"

Requirement:
—— Promoting structural reform of agricultural supply side, deepening rural reform in an all-round way and promoting all-round development of rural undertakings
—— Adhere to the road of revitalizing the socialist countryside with Chinese characteristics and speed up the modernization of agriculture and countryside

Elimination: unbalanced development between urban and rural areas

The Standpoint of "Implementing the Strategy of Vitalizing the Rural Areas": Integration of Urban and Rural Development

Report of the Nineteenth National Congress: To take the road of Socialist Rural Revitalization with Chinese characteristics, we must reshape the relationship between urban and rural areas and take the road of urban-rural integration and development.
Specific requirements:
We should resolutely eliminate the drawbacks of the system and mechanism, and make the market play a decisive role in the allocation of resources.
Better play the role of the government to promote the free flow and equal exchange of urban and rural factors;
Promote the synchronous development of new industrialization, informatization, urbanization and agricultural modernization.
We will accelerate the formation of a new type of urban-rural relationship between workers and peasants that promotes mutual promotion between workers and peasants, complements urban and rural areas, integrates them in an all-round way and enjoys common prosperity.

Abstracted from
"Deciding to Win the Great Victory of Socialism with Chinese Characteristics in the New Era by Building a Well-off Society in an All-round Way".
Report at the Nineteenth National Congress of the Communist Party of China
(18 October 2017)
President Xi Jinping

"Vigorously implement the strategy of rural revitalization. Scientific planning, sound urban-rural integration development system and mechanism, rely on reform and innovation to strengthen the new momentum of rural development."

Extracted from "Report on the Work of the Government": First Session of the 13th National People's Congress on March 5, 2018
Premier Li Keqiang of the State Council

Figure 2: Overall requirements of national strategy

2. Mission

2.1. Historical Review

Jinxi Town is located in Kunshan City, between Shanghai and Suzhou, belonging Jiangsu Province. Jinxi Town has a total area of 90.69 square kilometers. It has Unique Humanistic Landscape, and be famous of Folk Museums. When we talk about the word "canal", then we think about The most biggest and greatest Canal in China. The China's earliest national space strategy : It is (the Beijing-Hangzhou Grand Canal) ,as much important as the Great Wall.

In the Spring and Autumn Period, the State of Wu dug a canal from Yangzhou to Huai'an, Later on, the canal had been successively restored and expanded in several dynasties to the existing Beijing-Hangzhou Grand Canal. At that time, the southern part of the Yangtze River was the economic center of the empire, with the most abundant sources of wealth and food. One of the purposes of the construction of the Grand Canal is to transfer food and wealth from the south of the Yangtze River to the political center in the north of China, to provide economic support and food supply. The reason for choosing canal transportation is that it costed less and saved more time than land transportation. This project takes many years and it worded. Because of Jinxi is close to Chenghu Lake and has abundant rainfall and water resources, People worked hard and kept digging, the nature small lakes had been dug into lardge ones ,in Local language which called "Dang". and people dug canal to their homes, which called "bang", so they used family names plus "bang" as villages' names. Such as zhujia bang , gujiabang, These village names are still in use today, until now, jinxi also Retains the typical " bridge, water, house" of the traditional Jiangnan water village style.

The canal created Jinxi: High-quality ecological background, traditional land of fish and rice: fertile land fit for farming. So in the past, In the National Land Planning of the Beijing-Hangzhou Grand Canal, Jinxi thrives in response to water. The most important responsibility

of Jinxi is to provide food and economic contributions. Advantages and Past: Setting the tone of Jiangnan Water Township and Fish and Rice Township for Jinxi. After the founding of New China and the reform and opening-up, the economic development of the eastern coastal areas has been rapid. Jinxi is close to Shanghai, and has the advantage of location and policy of getting a month ahead of others. Under the background of the rapid development trend of the "Southern Jiangsu Model" and "Kunshan Model", Jinxi has achieved good development results.



Figure 3: Schematic Map of Beijing-Hangzhou Grand Canal

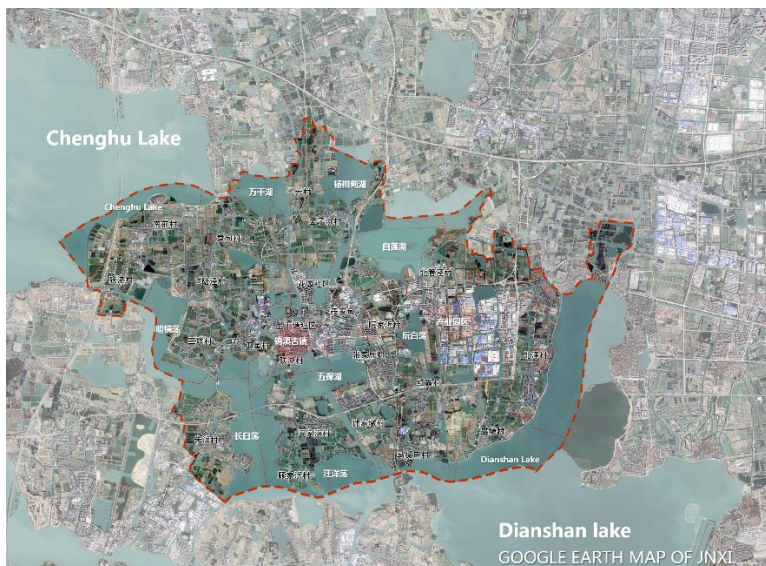


Figure 4: Research Scope of Jinxi Town

2.2. Trend analysis

Jinxi is in The Core Hinterland of Yangtze River Delta Metropolitan Circle——Shanghai Metropolitan Circle, according to Shanghai Master Urban Planning (2017-2035), Jinxi belongs to "New Economic Zone of Ecological Civilization". In the Upper Planning of Kunshan City, The Nature of Jinxi is to be the famous historical and cultural towns in China, the towns

of folk museums, and the famous tourist towns in the south of the Yangtze River with abundant lake resources. Kunshan has established the urban nature of "livable and industrial big cities with high quality development, famous international intelligent manufacturing cities, important strategic fulcrum linking Shanghai and Jiangsu, green ecological city with Jiangnan characteristics". The general plan also proposes to further dock with Shanghai and integrate into Suzhou, and strive to build Kunshan into a pilot demonstration area for the Yangtze River Delta to implement new development concepts, achieve higher quality development and a higher quality of life.

National level: preserving grain production function - 100,000 mu of good farmland in Kunshan and 1000 hectares of good farmland in Jinxi. Consensus at the regional level: At present, the premise of rural development, regional ecological maintenance is an indispensable function.

Ultimate goal: The experience of developed countries can eliminate the gap between urban and rural areas and achieve the goal of "integration of urban and rural life with differences, no gaps, mobility and barriers". So, Is it most likely that the integration of urban and rural life will be the first to achieve "difference, no gap, mobility, barrier-free"?

2.3. Contemporary Mission

Rural rejuvenation adheres to the guiding ideology of socialism with Chinese characteristics in Xi Jinping's new era, deeply implements the spirit of the Nineteenth National Congress of the Party and the Party congresses of provinces and municipalities, adheres to the combination of macro-policy orientation and local actual conditions, bases itself on "new background, new opportunities and new requirements", and avoids "urbanization, disorder and homogenization". Constructing the Rural Revitalization space to develop as a breakthrough, realizing the "three transformations" in planning orientation, and promoting the whole rural revitalization of Jinxi Town.

Thought change one: More importantly, high-quality development should be made from the perspective of developing the new ecological economy to find breakthroughs.

Second, we should explore the characteristics of the countryside. The countryside is no longer just a dependency of the city. For example, tapping rural leisure and recreation functions, preserving the regional characteristics and cultural heritage of Jiangnan Waterfront, improving rural living environment, improving agricultural quality, improving people's lives, and ultimately achieving the same level between urban and rural areas.



Figure 1: Current situation and trend & Main features and challenges



Figure 1: Principles and Guidance & Main Ideas and Countermeasures

3. Survey: the current situation of rural development in Jinxi Town

3.1. Functional positioning

lack of coordination between urban areas and rural areas at the macro level, failure to highlight their own characteristics at the village level, weak implementability, and weak links at the town level. In the latest Kunshan Master Plan, The Nature of jinxi is to be the famous historical and cultural towns in China, the towns of folk museums, and the famous tourist towns in the south of the Yangtze River with abundant lake resources.

At present, the planning of Jinxi can be summarized into four main areas.: Living Area、Eco-industrial Park Area、 Lake-side Area and Rural area.

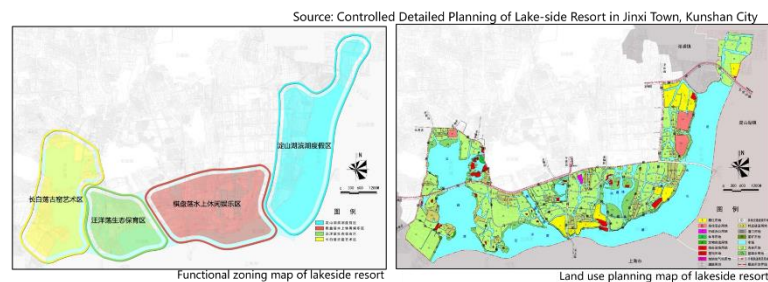
The positioning of the area around Dianshan Lake considers the cooperation relationship with its surroundings carefully. However, from the current positioning of the living area of ancient towns, the collaborative area around Dianshan Lake, the eco-industrial area and the surrounding rural planning, it is found that there is no close cooperation between them, and it is difficult to cohesive and develop, thus forming a competitive development trend. In addition, the importance of Jinxi as an important ecological conservation area around the lake has not been reflected, and the characteristics of the water towns in the south of the Yangtze River are not obvious.

Functional positioning

The lakeside tourist resort mainly consists of recreation and ecological sightseeing.

Development orientation

Planning and utilizing rivers, lakes, wetlands and green spaces in the plot to create eco-tourism sightseeing areas.



Functional partition

Four districts:

- 1.Dianshan Lake Resort:** Depending on the beautiful natural scenery along the coast of Dianshan Lake, it mainly serves the accommodation, catering and leisure of the tourist population.
- 2. Chessboard Waterfront Recreation Area:** Build lake-side eco-agricultural sightseeing, resort hotels, wetland parks and water experience centers.
- 3.Wangyangdang Ecological Conservation Area :**Popular science education in conservation.
- 4. Changbaidang Ancient Kiln Art Area:** Combining the ancient kilns near Zhujiadian, Zhubang and other villages, as well as the southern part of the town, the ancient kiln art zone is developed to form a kiln-themed tourist area.

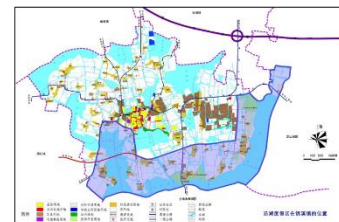


Figure 5: Detailed Control Planning of Jinxi Town Living Area in Kunshan

Functional positioning

It is a small town comprehensive area with the characteristics of giving priority to the comprehensive service function of cities and towns and taking into account the leisure tourism of water towns as a whole.

Development orientation

Promote people-oriented and smart growth model to form small towns with tourism characteristics under the background of new urbanization.

Functional partition

Generally speaking, the river system and main traffic arteries are divided into five functional areas. Four urban living areas and one tourist and leisure area.

Source: Controlled Detailed Planning of Jinxi Town, Kunshan City

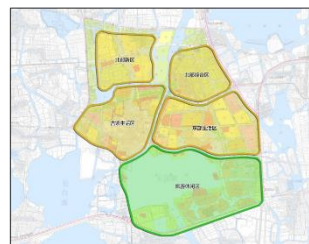


Figure 6: Detailed Control Planning of Lake-side Resort in Jinxi Town,

3.2. Population problems:

the income gap between urban and rural areas causes regional population factors to flow, which leads to the restructuring of rural social structure in Jinxi Town; self-built houses have high cost, high idle rate and low utilization rate.

The total population base of the town area is small, ranking behind Kunshan, and the population growth rate is slow. In 2017, the total registered population of the town was 446,000. The total population ranks seventh in 11 towns and districts of Kunshan City. Jinxi local aging phenomenon is prominent, in 2017, the proportion of the elderly over 60 years old is as high as 31%. Kunshan is one of the 10 cities with the highest proportion of migrants in China, and ranks fourth. Jinxi Town has a smaller migrant population than the immigrant population, and belongs to the population-importing region. Local young people in Jinxi go to the surrounding big cities to develop, while young people who come to work here come to Jiangsu Province or Anhui Province and Henan Province from farther regions. In 2017, the temporary population of Jinxi Town was 254,000, which reached half of the total household registration population. The proportion of young and middle-aged people from other places was high, reaching 95%.

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Therefore, improving the disposable income of Jinxi's rural areas, introducing, cultivating and perfecting the rural talent echelon, achieving the continuous increase of rural residents' income, ensuring and improving the living safety and quality of the people living and working here are also the problems to be solved in this rural revitalization.

rank	city	administrative level	province	The proportion of immigrants to permanent population
1	Dongguan	Prefecture-level cities	Guangdong	75.68%
2	Liuyang	County-level city	Hunan	72.06%
3	Shenzhen	Planned separate cities	Guangdong	67.71%
4	Kunshan	County-level city	Jiangsu	50.21%
5	Zhongshan	Prefecture-level cities	Guangdong	50.08%
6	Foshan	Prefecture-level cities	Guangdong	46.38%
7	Jinjiang	County-level city	Fujian	45.87%
8	Xiamen	Planned separate cities	Fujian	43.74%
9	Shanghai	Municipality	Shanghai	40.08%
10	Yiwu	County-level city	Zhejiang	38.39%

Table 1: Ten cities with the highest proportion of migrants in China

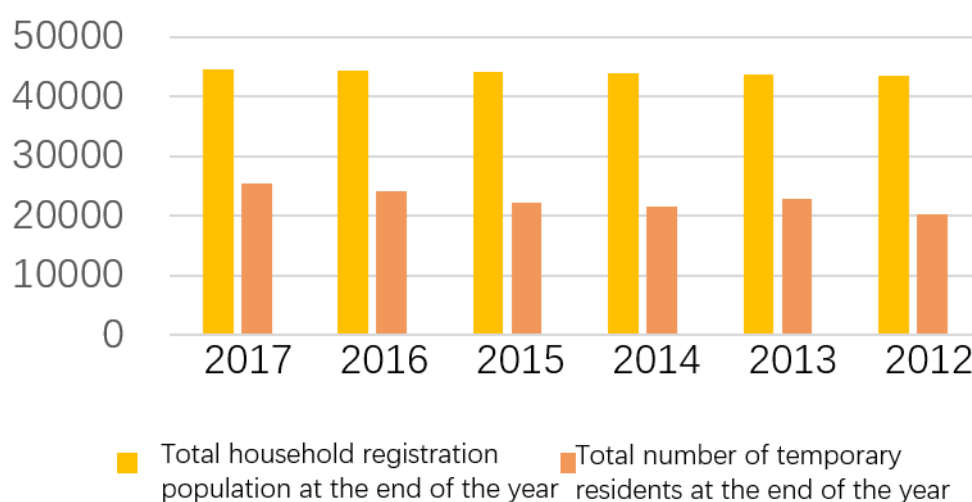


Table 2: Household Registration Population and Temporary Resident Population in Jinxi Town, 2012-2017

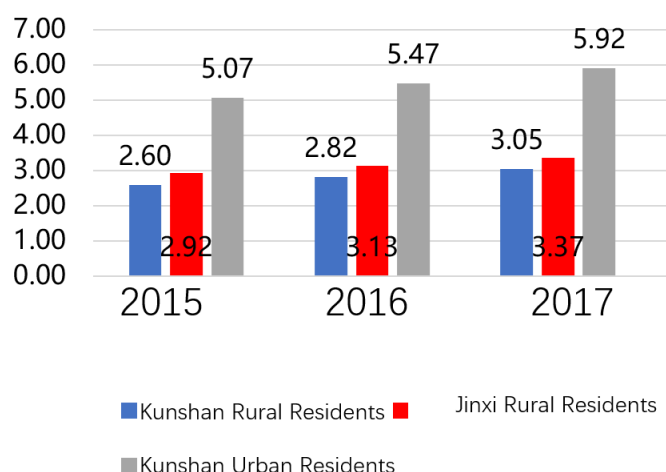


Table 3: Per capita disposable income of Kunshan urban and rural residents and Jinxi rural areas from 2015 to 2017(ten thousand)

3.3. Industrial problems:

agricultural growth is weak, the transformation of village industry is imperative, the service industry of tertiary industry is showing a growth trend, and has the potential and trend of creating "ecological new economy"

Kunshan City has long been in the forefront of the county economy in China. The land transfer of Kunshan City has basically been completed, and is operated by village land joint-stock cooperatives and various professional cooperatives. Kunshan Development Zone and High-tech Zone are the leading industrial parks in which the industrial manufacturing industry is developed; the modern service industry represented by Huaqiao Jingkai District is developing rapidly; and the tourism industry of ancient towns represented by Zhouzhuang is deeply rooted and flourishing.

Jinxi's total economic output is not high, but its agricultural performance is outstanding. According to the level of modern agricultural equipment, the total power of agricultural machinery and the number of large and medium-sized tractors in Jinxi Town are in the front rank among the districts and towns, and the proportion of primary industry is the highest. Compared with 11 towns and districts in Kunshan City, Jinxi Town ranks third, seventh and ninth in total grain output, total output value of agriculture, forestry, animal husbandry and fishery, and total GDP in 2017, respectively. Kunshan City vigorously promotes the development of green transformation of agriculture. Jinxi Town has also taken measures such as reducing fertilizer and pesticide, green ecological three-dimensional agriculture and so on to improve the quality of agricultural development. Farmers are not satisfied with the dividend distribution of cooperatives. The main reason is the efficiency of land management and the fairness of distribution. It is suggested that the quality of agricultural products be improved and local brands be promoted.

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In summary, the development of primary production agriculture is limited by the area of cultivated land (water surface). Agricultural economy will show weak growth depending on traditional operations, and new agricultural growth paths need to be explored. It is imperative for the industrial transformation of the second industry to take place in the village, and the service industry of the third industry is showing an increasing trend. Generally speaking, Jinxi does have the potential and trend to build a "new ecological economy".

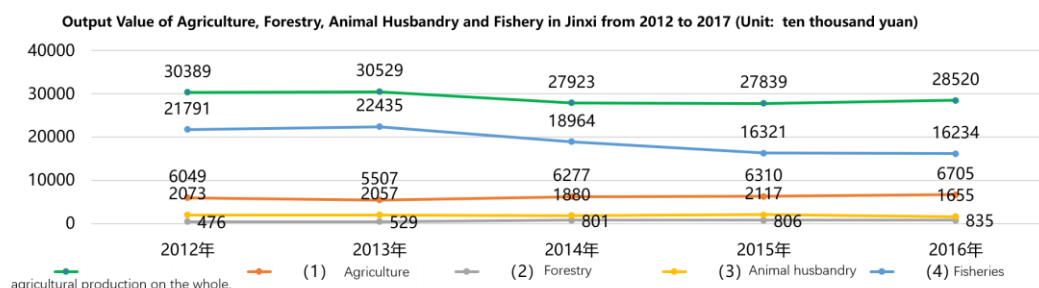


Table 4: Output Value of Agriculture, Forestry, Animal Husbandry and Fishery in Jinxi from 2012 to 2017

Percentage of Individual Business Households
Registered in 2017

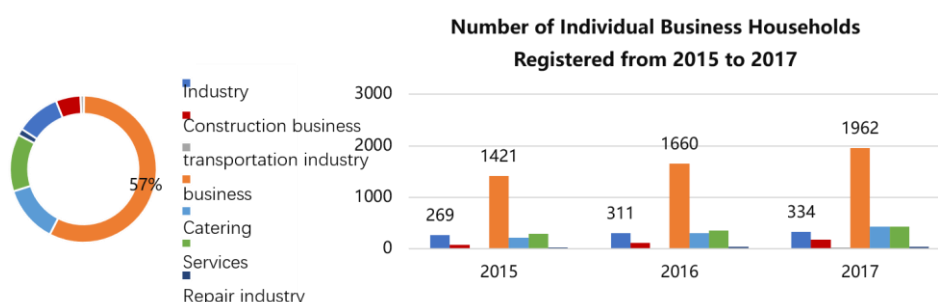


Table 5: Percentage of Individual Business Households Registered in 2017

Table 6: Number of Individual Business Households Registered from 2015 to 2017

3.4. Spatial problems

too dispersed space, resulting in the lack of organic links between the districts; land use indicators reduction, affecting the re-allocation of small public facilities, production facilities, and the problem of idle space resources.

The current spatial structure lacks support for future diversified industries, and because the space is too dispersed, the linkage between villages and communities is not strong, and the utilization rate of public facilities is not high. It is necessary to strengthen the linkage between villages and communities and promote the rational use of space resources.

In order to achieve the overall target of grain production security in Kunshan City, the cultivated land area of Jinxi increased year by year. From 2012 to 2016, the average annual growth rate of cultivated land area in Jinxi Town was +4.22%, and the production space increased. However, the lack of new land indicators led to the shortage of production facilities, such as grain dryers. In the future, the reduction of industrial land in villages will lead to severe transformation of enterprises in villages. According to the questionnaire survey, villagers hope that villages/communities need to increase public activity venues: parking lot, rice milling center, public activity space, garbage collection points, vegetable cultivation space, etc. Because of the lack of new land indicators in villages, it is impossible to allocate them.

Part of the idle space resources mainly come from the plot land after the closure of the village enterprises, which is temporarily idle due to the need for high-cost land restoration investment to return cultivated land, and the idle workshop of some large industrial districts. The other part is the outsourced project land, which is idle due to the enterprise's own business reasons.

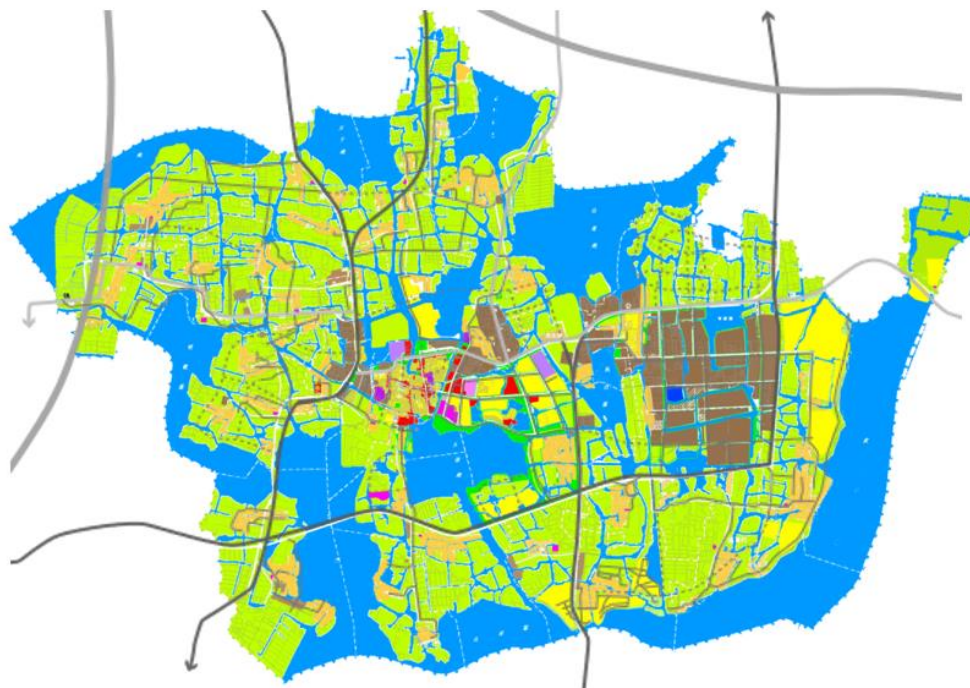


Figure 7: Current Situation of Jinxi Town in 2018

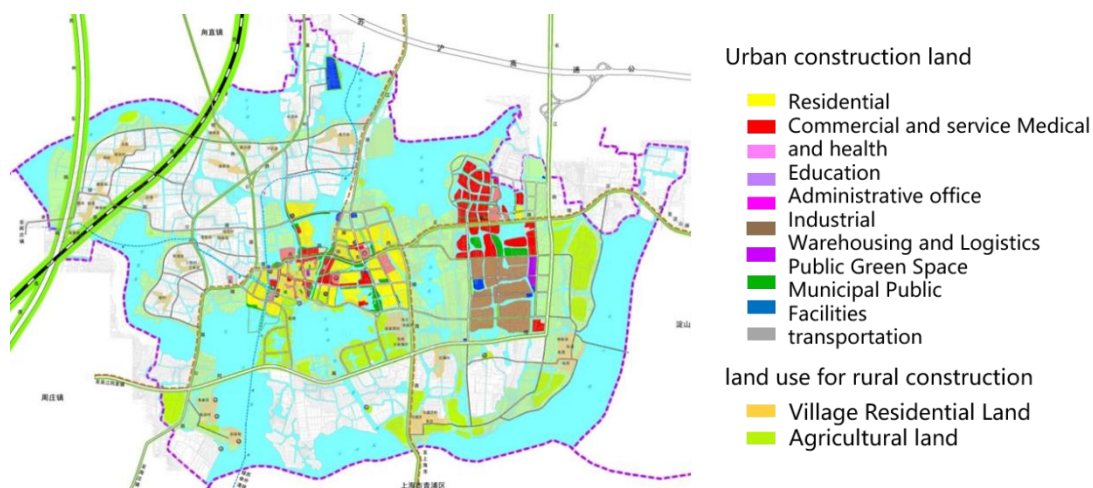


Figure 8: Planned Land Use of Jinxi Town in 2030

4. Strategy: Development Strategy of Rural Revitalization

4.1. Development Orientation Strategy

4.1.1. Development Orientation

New Jiangnan Water Village as Beautiful as Poetry and Painting

4.1.2. Development Goals

- 1) Shanghai Metropolitan Cooperative Development Zone New Jiangnan Water Town Model
- 2) The Benchmark of Agricultural and Rural Modernization in Suzhou
- 3) Model of Urban-Rural Integration Development in Kunshan City

4.1.3. Staging objectives

- 1) New Form of Business: A Model of Urban Modern Agriculture Development
 - We will promote structural reform of the agricultural supply side. Around promoting the upgrading of the industrial system, production system and management system of agriculture, the modernization level of agriculture will be further promoted.
 - Promote the integration of agriculture, commerce, culture and tourism, promote the development of modern services such as tourism, exhibition and cultural creation, and promote the integration of Rural three industries.
- 2) New Life: A Model of Urban-Rural Integration Development
 - We will further promote the development strategy of urban-rural integration, promote the free flow and balanced allocation of urban and rural factors, and build a new urban-rural relationship with mutual interaction and complementary symbiosis.
 - To meet the needs of accelerating the transformation of the age structure, employment characteristics, lifestyle and quality of life of new rural people, and to build a new way of production and life in rural areas.
 - It meets the requirement of two-way interaction between urban and rural areas. Improve the level of infrastructure and supporting services, attract urban capital and residents through high-level livable environment construction, and promote urban-rural integration.
- 3) New Jiangnan: A Model of Spatial Form of Water Township in New Jiangnan
 - Rehabilitation of local ecology, inheritance of local culture, protection of local form, with the concept of global landscaping, scenic spots, accessibility and participation, shape Damei agricultural water form.
 - Strengthen the comprehensive improvement of rural human settlements environment, build a new beautiful countryside (block), repair soil, control water quality, and build a beautiful local environment.
 - Combine the functional format with the shape shaping to ensure the strategy of shaping the differentiated style of production, life and ecology.

4.2. Population structure optimization strategy

4.2.1. Promoting population mobility and optimizing population system

To cope with the needs of citizenization, innovation and entrepreneurship, equalization of basic public services in urban and rural areas, the trend of aging, and population mobility, we should reduce the cost of withdrawal from rural areas by replacing urban housing with rural property and land replacement, and reduce the cost of urbanization through household registration reform. We should innovate the mechanism for the introduction and cultivation

of rural talents, and comprehensively cultivate new types of professional peasants, professionals and scientific and technological talents. The basic services of employment, social security, housing, education and medical care should be guaranteed, and a complete policy system should be formed to ensure equal treatment for transfer residents and local residents.

4.2.2. Guarantee public service facilities and create a rural public activities circle

To cope with the needs of citizenization, innovation and entrepreneurship, equalization of basic public services in urban and rural areas, the trend of aging, and population mobility, we should reduce the cost of withdrawal from rural areas by replacing urban housing with rural property and land replacement, and reduce the cost of urbanization through household registration reform. We should innovate the mechanism for the introduction and cultivation of rural talents, and comprehensively cultivate new types of professional peasants, professionals and scientific and technological talents. The basic services of employment, social security, housing, education and medical care should be guaranteed, and a complete policy system should be formed to ensure equal treatment for transfer residents and local residents.

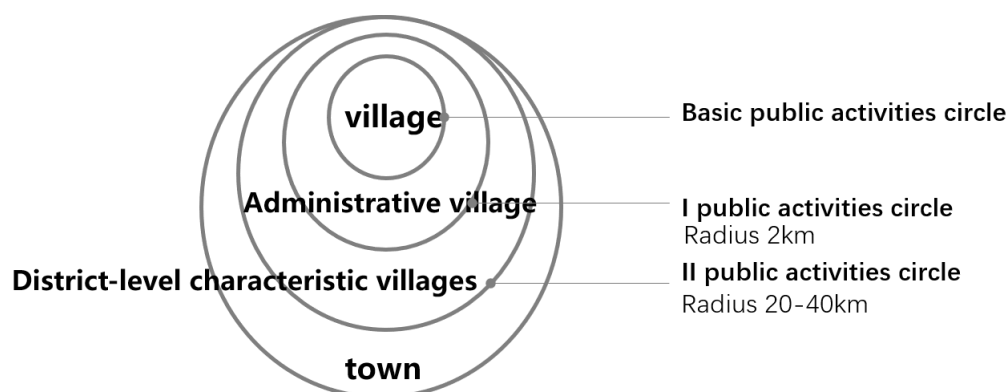


Figure 9: public activities circle in Rural Community

4.3. Industrial Development Strategy

To excavate the cultural value, leisure value, ecological value and economic value of the countryside, take building "one town and one product" of Jinxi Town as a breakthrough point, take the lead in realizing agricultural modernization town and sharing pastoral water villages around Dianshan Lake area as the goal, and realize the sustainable development of the new ecological economy.

4.3.1. Deep integration and upgrading of industrial system

To consolidate the agricultural foundation and further promote the integration of primary, secondary and tertiary industries. With modern agricultural parks, new rural pastoral complexes and characteristic rural areas as the main carriers, we should guide and support industrial and commercial capital and social forces to participate in Rural Revitalization and the integration and development of rural primary, secondary and tertiary industries.

4.3.2. Ecological wisdom and optimization of production system

Rooting in the ecological concept, using modern technological means to comprehensively improve the production level.

- 1) Agricultural development model green: improve the quality of cultivated land, high-standard farmland construction; reduce inputs to achieve zero growth of fertilizers and pesticides; recycle waste, improve the utilization of straw and other resources; industrial ecological coupling, the development of ecological recycling agriculture.
- 2) Intelligent agricultural production and operation: agricultural technology and equipment, mechanized intelligent equipment; the development of agricultural Internet, rural e-commerce and so on; information-based circulation supervision, implementation of quality and safety traceability system, etc.
- 3) Agricultural management service informationization: agricultural socialization service, the establishment of information system to serve agricultural production; villagers in the palm of Jinxi, to build a government service system of mobile micro-messaging.

4.3.3. Cooperation and Sharing to Activate Business System

- 1) Give full play to the leading role of the new business entities, and realize the organic connection between small farmers and the development of modern agriculture. Innovation and development of rural cooperative economic organizations. Supporting the well-conditioned community joint-stock cooperatives to explore the establishment of modern enterprise management system in the mode of joint-venture development.
- 2) Optimizing the quality of collective economic development. Appropriate development and construction of agricultural and trade markets, urban complexes, science and technology entrepreneurship parks and other business projects to increase collective income. For the development of residential and pension projects using idle farm houses, support rural collective economic organizations to activate the utilization of idle farm houses and homesteads, develop residential and pension projects by means of leasing, pooling and equity.

4.3.4. Supporting and perfecting the industrial chain of Agricultural Engineering in an all-round way

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- 3) Industrial Platform Construction Project. At present, there are about 1500 rice processing enterprises in Jiangsu Province, with an annual output of 25 million tons, accounting for 9.3% of the country. However, there are many small and bulk processing factories with low equipment level. There are only a handful of large-scale precision processing enterprises such as grain and oil in northern Jiangsu, rice cultivation in Sukeng, Jiangnan Spring in Changzhou and Baoying Baobao grain and rice industry. The

idle rural collective construction land can be replaced, and the grain processing base in Jinxi Town can be established to be responsible for production and grain processing, the entity marketing platform for exhibition, and the township founding base for publicity and promotion, so as to form a perfect industrial engineering chain.

4.4. Space Development Strategy

Based on the principle of layout optimization and sharing of public service facilities, we should guide spatial renewal, maintain the leading role of agricultural production function, improve the service quality of the three industries, reduce the consumption of land and open space, improve the utilization efficiency of existing land and open space, and reconstruct villages in various ways with "industrial transformation" as the core. Material space environment, activating the vitality of traditional culture. Improving the rural human settlement environment and forming a sustainable development pattern of urban and rural ecological environment integration and complementarity, economic, social and ecological coordination.

4.4.1. Spatial Assessment and Classification of Rural Areas

From the analysis of gross national product, population statistics, industrial statistics, agricultural land area, gross grain production and per capita income of farmers, the relationship between industrial functions and spatial distribution is obtained. For example, the overall cultivated land area and yield in the northwest region are relatively high (7 villages); other villages (9 villages) with agricultural production function as the main function, and villages (6 villages) with non-agricultural production function as the main function; the overall economic strength of villages is proportional to the population (3 villages). Only a small number of villages have weak secondary industry (5 villages) and the tertiary industry around the lake region has more development potential (3 villages).

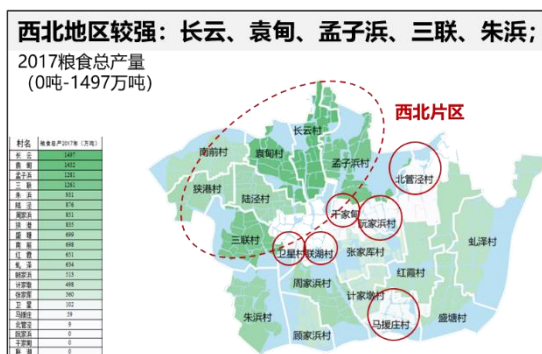


Figure 10: Sketch map of spatial assessment: Agricultural land area (arable land area, paddy field intensive); gross grain production; spatial assessment of per capita income of farmers

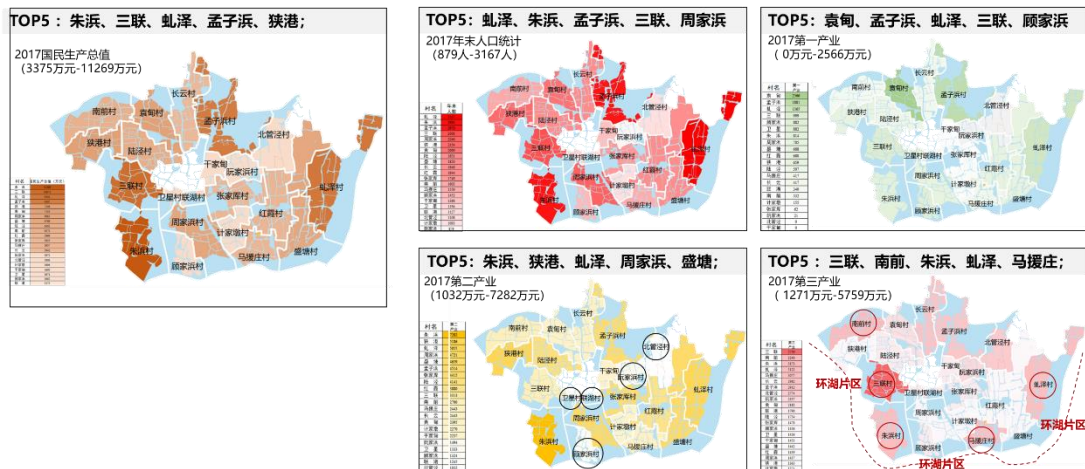


Figure 11: Sketch map of spatial assessment: GNP; demographic statistics; output value of first, second and third production

4.4.2. Strengthen the implementation of space use control

On the basis of the delimitation of "three districts and three lines", we should strictly protect the lake wetland, coordinate the protection of Dianshan Lake and Chenghu Lake, and control and manage the internal lake. Strictly abide by the permanent basic farmland red line, basic farmland management and control standards.

4.4.3. Optimizing Rural Development Space

- 1) Reconstructing the planning structure of rural revitalization: one center, one corridor, two axes and four districts.
 - One Heart: Jinxi Ancient Town Comprehensive Service Center
 - One Corridor: Huanjinxi Vigorous Corridor
 - Two axes: along the Jin-Shang road Development Axis and Bailian Lake Ecological Development Axis
 - Four Areas: Modern Agricultural Production Zone, Ancient Town Comprehensive Service Zone, High-tech Industrial Zone, Lake Rim Leisure Resort.



Figure 12: Structural sketch of Rural Revitalization Planning in Jinxi Town

- 2) Create efficient and intensive rural production space. Build Jinxi model of linkage among agricultural production area, rural community, Jinxi town area and Rural Creative Zone. Rural Creative Zone: Develop into an ideal life village cluster with multiple meanings; develop scientific and technological agriculture in agricultural production areas; build 22 rural communities around comprehensive service centers in villages; and form a more complete supporting area with the focus of Jinxi town.

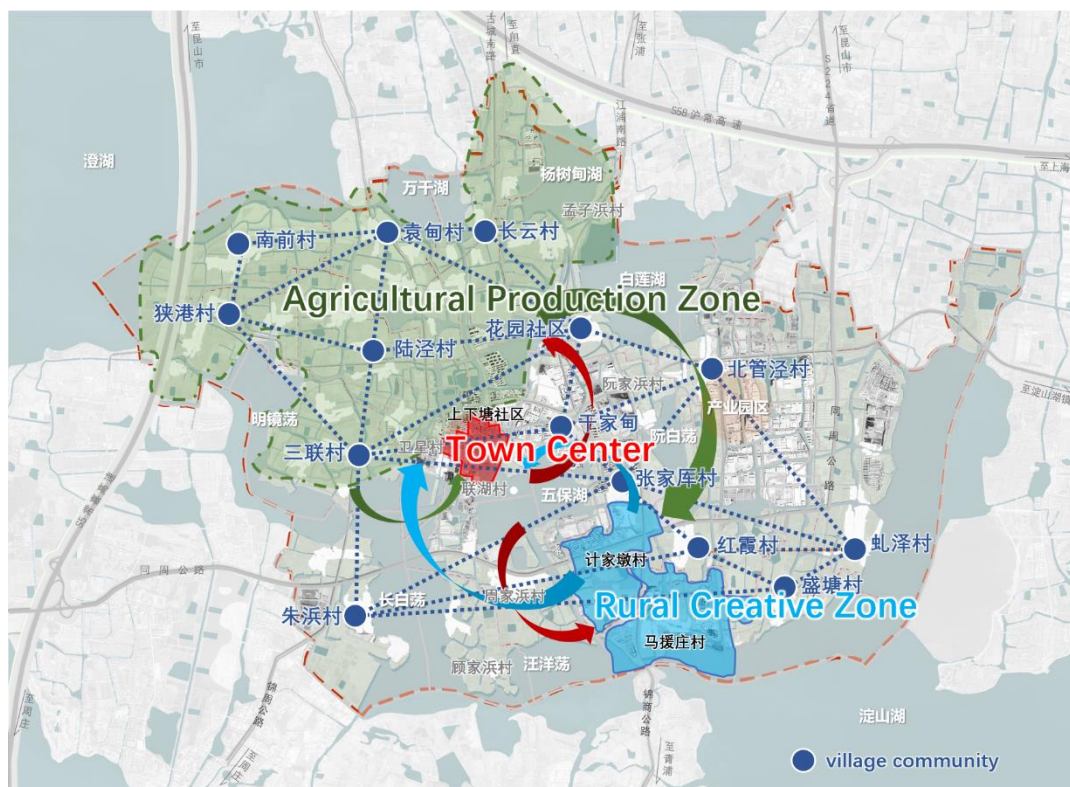


Figure 13: Four-zone linkage diagram

- 3) Build a suitable living space in the countryside. According to the characteristics of each village, there are high-quality fields, farmland and water scenic spots, green exhibition and marketing areas, community living areas, ancient village tourist areas, ancient kiln art areas, lakeside resorts, etc.

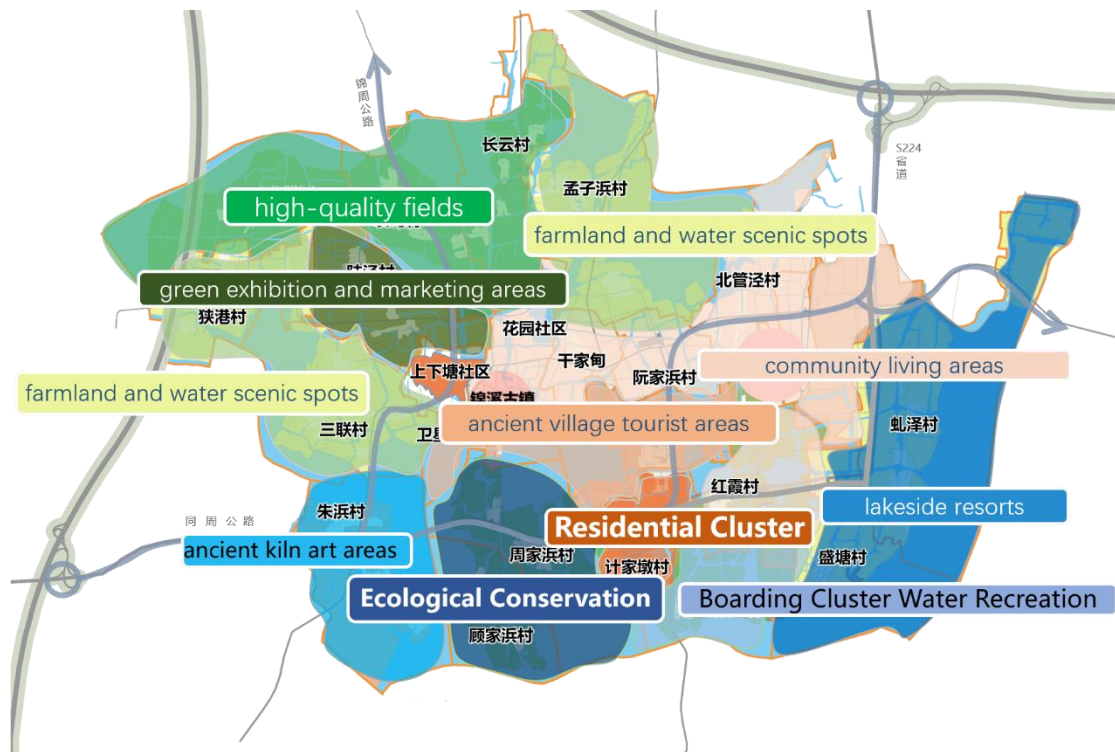


Figure 14: Distribution of Village Characteristics

- 4) Create a blue-green interwoven Shuimei Jinxi. Improve environmental quality. Water environment: "Five lakes, three ripples, six pools and five patches" regionalized regulation, proposed integrated watershed protection mechanism, control of agricultural non-point sources, enhance runoff control, establish a rainwater runoff management system consisting of roads, water system vegetation buffer zones and rainwater gardens. Ensuring biodiversity of farmland ecosystem, improving and restoring farmland soil, and strictly controlling chemical fertilizer, agricultural waste and agricultural water discharge.

Systematic protection of internal Lake pattern-Regionalization

Yang-shitian Lake

IV~V类水,水质较差;周边的渔业养殖提供水资源同时兼有蓄水调洪、维持生物多样性、调节局部小气候等功能,为周边居民的生活提供了良好的生态环境。

Wanqian Lake

IV类水,万千湖四周环境优美、风景秀丽,湖泊周边紧临澄湖、杨氏甸湖,大东港、田杜港等数条河流与之相遇,具有良好的洪涝调蓄、生态、养殖和景观功能。

Mingjing Dang

水流以由西向东为主,环湖出入湖河道共有19条。调蓄洪水、净化水质、维持生物多样性、调整流域局部天气等自然功能;还为湖边养殖提供丰富的水资源,是天然的水产品养殖场所;同时也承载着湖滨周边居民的生活,是昆山自然景观格局的重要组成部分。

Wubao Lake

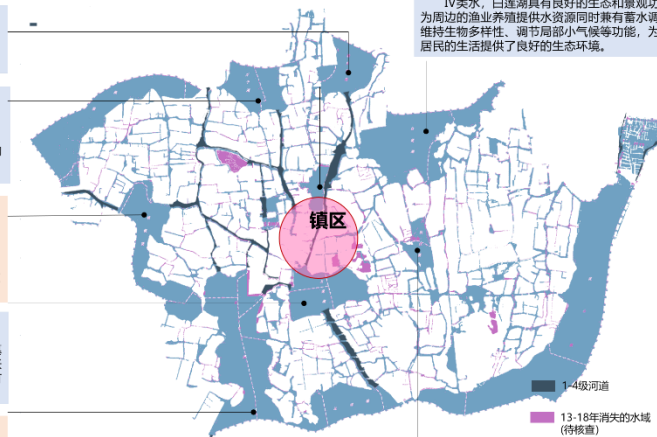
同时南新港、东西中心河等多条河道进出入该湖,向南沿陈墓港入汪洋荡,水运向东由吴淞江或淀山湖直达上海,向北经张家港可达长江口。因此陈墓荡也占据一定的航运地位,还具有排水蓄水的防洪功能。

Changbai Dang

IV类水,有调蓄洪水、排涝灌溉、净化水质、维持生物多样性、调整流域局部天气等功能,还为湖边养殖提供丰富的水资源,是天然的水产品养殖场所。出入湖河道:长白荡昆山境内支流共有15条,其中进湖河道有11条,出湖河道有4条。

Bailian Lake

IV类水,白莲湖具有良好的生态和景观功能,为周边的渔业养殖提供水资源同时兼有蓄水调洪、维持生物多样性、调节局部小气候等功能,为周边居民的生活提供了良好的生态环境。



数据来源:
五湖三荡一河一策行动计划

Ruanbai Dang

阮白荡离城市建成区较近,湖泊水深较大,环境优美、风景秀丽,具有良好的生态、养殖和景观功能。同时沿兴港、中横港等多条河道与之相连,具备一定的航运能力和防洪功能。阮白荡昆山境内支流共有10条。

Figure 15: Schematic Map of Regional Renovation of "Five Lakes and Three Dangs"

5. Case Study: Villages Revitalized in Rural Areas

5.1. Case Study of Agricultural Upgrading Village: Changyun Village

5.1.1. Target positioning

High-efficiency and High-quality Agricultural Benchmarking

5.1.2. Staging objectives

- 1) Leading Party Construction Policy Innovation
- 2) Technology Agriculture & Application Practice
- 3) Stereoscopic Agriculture
- 4) Re-upgrading Changyun Model

5.1.3. Main paths

Continue to give full play to the advantages of Changyun's state-level cooperatives, continue to upgrade policies, agriculture and operation

- 1) Scientific and Technological Agricultural Experimental Field
- 2) Upgrading Crab Culture in Paddy Field
- 3) Renewal of duck farming in paddy fields

5.1.4. Strategies

Strategies for Agricultural Industry Upgrading: Leading the Application of Agricultural Technology; Developing Three-dimensional Agricultural Economy with Ecological Circulation ; Creating Urban Leisure Agriculture.

Changyun Model Upgrading Strategy: Upgrading the Model of "One Town One Product"; Constructing Cooperative Development Mechanism; Shaping the Brand Characteristics of Changyun.

5.2. Case Study of Industrial Integration Village: Xiagang Village

5.2.1. Target positioning

Eco-oriented Agricultural Park

5.2.2. Staging objectives

- 1) Ecologically Beautiful Leisure Fishing Village
- 2) North Portal of jinxi
- 3) important Eco-node of Chenghu Lake
- 4) Best natural outdoor classroom

5.2.3. Main paths

- 1) Restoring Ecology

Combining the construction of Chenghu ecological conservation area, Ecological Corridor around the lake and small industries that have been cleared away, we should further expand ecological effects, strengthen ecological conservation and control, and build demonstration

sites for ecological civilization construction. At the same time, we should attract tourism with ecology, introduce green tourism products, and attract tourists to increase vitality.

2) Expanding Industry

On the basis of the current agriculture, we should supplement the service industry and tourism industry, re-integrate the resources with the idea of "agriculture + tourism", dig the tourism resources in depth, and promote the transformation of regional industries and expand employment opportunities.

5.2.4. Strategies

Core development issues: through an ecological chain, a cultural chain, protecting the ecological background, coordinating spatial elements, transforming traditional agriculture, innovating urban and rural co-ordination

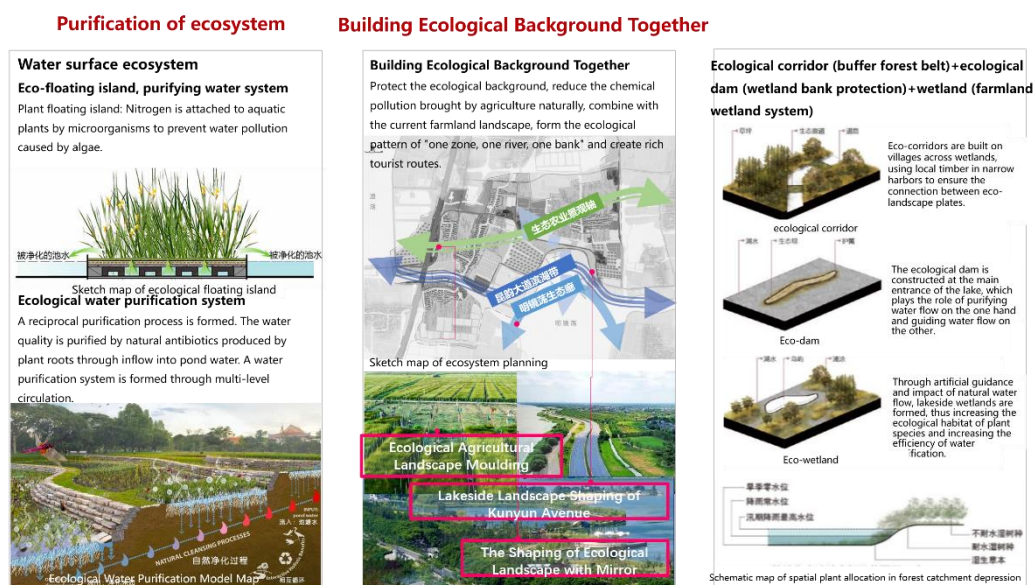


Figure 16: Strategy schematic



Figure 17: Strategy schematic

5.3. Case Study of Village of Village Community Type: Zhangnan Village

5.3.1. Target positioning

Demonstration Village of Renovation of Human Settlement Environment in Water Township of Jiangnan

5.3.2. Staging objectives

- 1) The most livable pastoral community
- 2) rural tourism Leisure destinations
- 3) Shanghai Suburbs Living in Water Township
- 4) The Experience of Slow Life

5.3.3. Main paths

- 1) Village upgrading and environmental optimization
- 2) Business Form Introduction and Crowd Attraction
 - Link up with Jijiadun to build an international Fanxin Jiangnan on the west side of Dianshan Lake.
 - By virtue of the location advantage close to the international metropolis, we can gather the strength and wisdom of different groups, and provide "golden tricks"
 - Attracting and retaining international villagers, returning visitors, elderly people, tourists and local villagers

5.3.4. Strategies

- 1) Leisure tourism Countermeasures
 - Improvement of water environment
 - Space Node Optimization-Sharing
 - Restoration of ecosystems
- 2) Countermeasure of Village Promotion
 - Traffic network of dredging Road
 - Supporting High-end Service Facilities
 - Optimizing Public Activity Space
- 3) Measures to Improve Human Settlement Environment
 - Improvement of water environment
 - Space Node Optimization-Sharing
 - Restoration of ecosystems

5.3.5. Master plan



Figure 18: Zoning format layout of ZhangNan Village

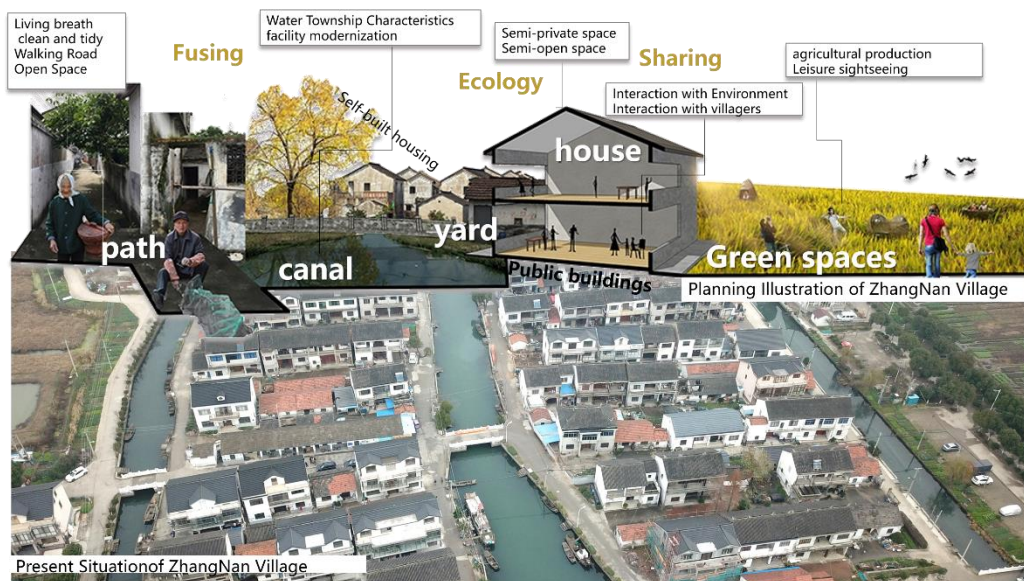


Figure 19: Design Concept- New Jiangnan Water Township

5.4. Case Study of Industrial Returning Village: Zhubang Village

5.4.1. Target positioning

- 1) Jinxi Town Industrial Transformation Demonstration Village
- 2) Agricultural Creation, Cultural Creation and scientific Creation Fusion Creative Culture Park

5.4.2. Staging objectives

- 1) Industrial Sites Thematic tourist destination
- 2) Art and Culture Exhibition Settlement
- 3) History and Culture Exhibition Museum Group
- 4) Highlands of Kunshan's innovation

5.4.3. Main paths

Plant renovation, facility matching and environmental renovation

Combining Zhudianyao ancient kiln art culture and Jinxi township enterprise culture, introducing R&D companies and universities, leading the transformation and operation of local enterprises, taking into account the comprehensive format, focusing on the transformation of scientific research results, and setting an example of Jinxi industrial transformation.

5.4.4. Strategies

- 1) Regional Linkage Countermeasure
 - Space-Culture Linkage Axis
 - Lakeside Scenic Belt and Great Tourist Circle Around the Lake
 - Integration of Four States and Three Creations
 - Space renovation of workshop
- 2) Strategies for Cultural Inheritance
 - Comprehensive Culture and Activating Space
 - Integrating Innovation and Exploiting Potential
 - Organic Renewal and Vitality Promotion
- 3) Strategies for Space Upgrading
 - Forming Industrial Heritage Cluster
 - Constructing landmarks of landmark Tourism
 - Completing the Historical Mission of the New Era



Figure 20: Current Situation and Problems Analysis



Figure 21: Master plan

6. Conclusions

At present, the proposal of the national strategy of Rural Revitalization is of great significance to realize the integration of urban and rural areas and the modernization of agriculture and rural areas in China. As the villages in the core circle of Shanghai Metropolitan Circle, we should take "industrial prosperity, ecological livability, rural culture, effective governance and rich life" as the general requirement, seize the opportunities for development within the circle of Shanghai Metropolitan Circle, take "ecology, sharing, integration and high quality" as the core concept, adhere to the agricultural standard, and adhere to urban and rural areas. Overall planning, from the "positioning, population, industry, space" four aspects of an all-round strategic deployment, to promote institutional innovation of the physical mechanism. Meanwhile, the strategy of Rural Revitalization should respect history and local customs, adhere to the idea of urban-rural co-ordination according to different types of villages, put forward planning strategies according to local conditions, so as to make rural revitalization into an acceptable, concentered and operable strategy system, and help Jinxi become a blue-green interweave in the future, glowing brilliant and vigorous—New Jiangnan Water Township.

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