

Strategies of rural planning and development of suburbs of Shanghai under the global city target

Analysis based on Zhangyan village, Shanghai

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Abstract

Purpose: To discuss what kind of role that the rural areas in suburbs of the large city in China should take during China's urbanization and rural revitalization process.

Background: The development and construction of rural areas in the suburbs of large cities in China is closely related to the development of the cities. Due to their special locations and resources, under the policy background of China's new urbanization and rural revitalization, the rural areas in the suburbs of large cities have become the practicing field of urban-rural regional coordination and integration and the frontier not only for a preparatory space and test site for China's urbanization process, but also a catalyst for promoting the modernization and sustainable development of rural areas.

"Shanghai 2035" has put forward its development goal, building Shanghai "an excellent global city" in 2035. Since the rural areas are the historical epitome of Shanghai's cultural heritage, and are also the spatial basis for ecological safety of the city, It has become a crucial supporting element for Shanghai to build itself into an recognizably excellent global city.

Synopsis: This article first reviews the evolution of rural planning in Shanghai, which can be divided into four stages: spontaneous construction, "point domain" regulation, urban-rural coordination, and comprehensive regulation for the whole areas, then analyzes and summarizes the effectiveness and deficiencies of rural planning at each stage and taking the planning practice case of Zhangyan Village, Zhonggu Town, Qingpu District in Shanghai as an example.

Case Study: Zhangyan Village, Zhonggu Town, Qingpu District, Shanghai

Measures: Basing on the historical status and regional advantages of Zhangyan Village, the planning strengthens the mutual interaction and communication between urban and rural areas, reserve rural service and secondary development space, shape a new model of harmonious urban and rural development, combined with the background of globalization strategy of CSCEC and Shanghai's Excellent Global City development goal.

Results: The planning has been carried out for one year, providing experience and methods for rural planning and policy implementation in suburbs of large cities in China.

Keywords

Suburb, rural areas of big cities, rural planning, rural revitalization, urban-rural coordination, Shanghai

1. Introduction: Policy Background

1.1. China's urbanization stage

China's 7th National Census data showing that, Chinese urban resident population number has reached 901.990 million people, 610 thousand km² of urban built-up area, and the urbanization rate has reached 63.89% (2020 Statistical data). Some experts predict that China's urbanization rate will reach 75% to 80% in 2035, which is expected to reach the same level as developed countries. This means that in the next 15 years, China will add nearly 400 million urban residents. In 2016, China began to implement New Urbanization strategy-this is a people-centered, high-quality and sustainable urbanization road with Chinese characteristics. The strategy's fundamental purpose is to improve quality of people's life, achieve modernization of the whole country, narrow the gap between urban and rural development among different regions, and finally realize the harmony between man and nature.

On the other hand, it is predicted that China's rural population will fall below 25% of the total population in 2035. However, due to China's relatively huge cardinal number of population, the rural population will still be around 300 to 400 million by then, which is basically equivalent to the total population of the U.S. Influenced by its own historical factors and development conditions, China has formed its current unique urban-rural dual system structure. The government adopted a series of policy systems to solidify the dualistic structure of urban and rural areas, forming an urbanization model dominated by the triple promotion of the central government, local governments, and market forces, (Yin Zhi) which has helped China accumulate capital for urbanization and industrialization by relying on urban land transfer, urban-rural industry-agricultural scissors gap, etc., so that Chinese urban construction and economic development have achieved remarkable results during past 40 years. At the same time, however, the problems of rural area have gradually been exposed. Rural construction has stagnated, rural population loss, backward facilities, dilapidated rural landscapes, aging and hollowing, and the gap between urban and rural areas has gradually widened.

Looking at the process of urbanization and rural construction in other countries, we can find that the industrialization, urbanization, and rural construction in Japan, South Korea, and Western developed countries be progressed gradually. First, industrialization promotes urbanization, and when urbanization entered basically stable stage, the construction of back-feeding the villages began. Different from Japan, South Korea, and some Western developed countries, China's construction and development are unique. China's industrialization, urbanization, rural revitalization, and informatization are multi-line paralleled. Affected by the impact of COVID-19 and more and more complicated international situation, the global economic development trend is still unclear. Under the background of China's domestic economic transition and governance reform, the contradictions and problems faced China will be unprecedentedly complex and more volatile.

1.2. Development of Chinese urban-rural relationship

China's current urban-rural relationship is at a critical turning point. From solidification on duality between urban and rural areas in the past to urban-rural diversified integration, from simple fund-feeding to comprehensive improvement in entire field, from rural-to-urban one-way flow of elements in the past to two-way flow between urban and rural areas to promote each other better. Comparing the process of rural construction in neighboring countries, South Korea and Japan have achieved better results by promoting the development of rural areas through a series of top-down or bottom-up national policies when the urbanization rate is about 60%. For example, the "New Village Movement" carried out in South Korea in the 1970s, "New Community Movement" and "One Village One Product" movement in Japan. Greater policy guidance, financial support and technical support were given, which effectively

improved the rural ecological environment and quality of life, and promoted two-way interaction and exchanges between urban and rural areas.

In 2017, the Central Committee of the Communist Party of China issued the "Rural Revitalization Strategy" centering on general requirements of "prosperous industry, livable ecology, civilized rural style, effective governance, and prosperous life", it proposed to "establish and improve the urban-rural integrated development system, mechanism and policy system, and accelerate the promotion of the modernization of agriculture and rural areas". The overall improvement of the level of rural development and the quality of the human settlement environment from the aspects of production, life and ecology is of great significance for eliminating the dualistic structure of urban and rural areas, and promoting the integration of urban and rural areas and the development of regional integration.

Rural areas in China's metropolitan region are overlapped by multiple strategies such as New Urbanization and Rural Revitalization. The formulation and implementation of rural planning in those area will also face more complex and diverse challenges. The level of urbanization in metropolitan areas is relatively high. The urbanization rate of megacities represented by Beijing and Shanghai has exceeded 85% , reaching or close to the level of that in some developed countries. But the level of development in rural areas is far behind that of developed countries. (Quotation - Rural Revitalization in Metropolitan Areas) In order to achieve higher-quality sustainable development, China currently implements stricter land and population control policies in metropolitan areas, which will have major impact on urbanization rate, industrial development, land use layout and population structure in metropolitan areas.

In 2020, the CPC Central Committee proposed to speed up the formation of a new development pattern of the domestic and international double cycles, with the domestic cycle being the main body of this pattern. This is a major strategic adjustment and long-term planning and deployment with a view to China's future higher quality and sustainable development. Shanghai has long been the vanguard of China's reform experiment and has played an important strategic link and leading demonstration role in the domestic and international double cycle. In "Shanghai Master Plan (2017-2035)" ("Shanghai 2035"), Shanghai will basically build itself into an "an excellent global city, an admirable city of innovation, humanity and sustainability as well as a modern socialist international metropolis with world influence". In the new era, Shanghai should focus on both domestic and international dual-track economic development and the two wings of Pudong, Qingpu, where spatial development is taking place. Currently, Shanghai is carrying out the construction of two pilot areas, Lingang New City Area and Yangtze River Delta Integration Demonstration Area, respectively connecting the two major international and domestic circular strategies.

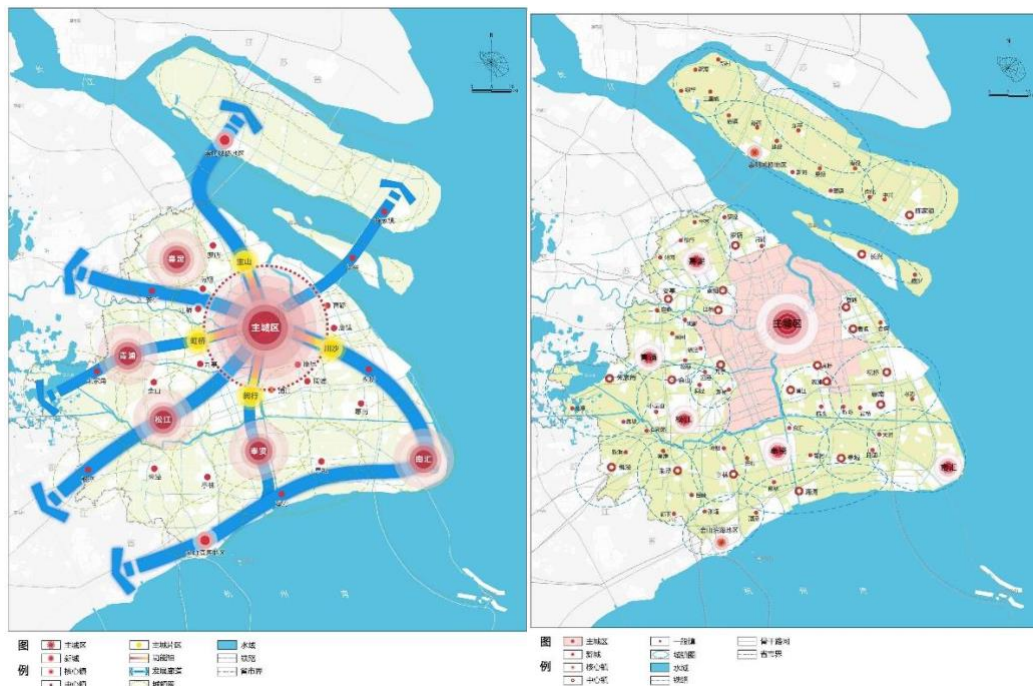


Figure 1. Shanghai 2035 Master planning (from: 首页_上海市规划和自然资源局 (sh.gov.cn))

This paper is on the basis of reviewing and summarizing the development process of planning and construction of Shanghai rural areas, taking Zhang Yan Village in Zhonggu Town, Qingpu District, Shanghai as an example, Introducing the planning strategy and development path of rural areas in Shanghai metropolitan area with the overall goal of building an "excellent global city" under the background of dual strategies of New Urbanization and Rural Revitalization in Shanghai.

2. The history of rural planning in Shanghai

Since the reform and opening up, Shanghai's rural construction progress has been greatly affected by the stage of regional urbanization and can be roughly divided into four stages, namely spontaneous construction stage, point-domain housing construction regulation stage, regional urban - rural coordination stage, and all-element-and-territorial comprehensive regulation stage.

2.1. Spontaneous construction phase

In the early days of the founding of New China, in the face of post-war national economic decline, serious poverty and starvation, all policies and systems formulated by the Party Central Committee took liberation and development of productive forces and the realization of socialist industrialization as the overall goals and tasks. In 1954, the 1st National People's Congress put a task to achieve the "four modernizations", where on the "agricultural modernization" requirements, mainly focusing on the dimension of agricultural productivity. In comparison, the concept of "rural modernization" has not risen to the height of national strategy for a long time. (Central Party School Wang Xiaoli) During this period, the country's rural construction has been in a spontaneous state. Due to the constraints of policies and farmers' own economic conditions, rural construction has not developed significantly.

2.2. Point-domain housing construction regulation stage

In 1978, China established the general line of reform and opening up. Farmers' increase in incomes made them be able to meet their own urgent needs for building new houses. For a time, the number of newly built houses in rural areas increased sharply. In order to effectively guide farmers to build houses and rationally use the agricultural land, in 1983 Shanghai promulgated the "Village Land Management Rules for Housing Building". It is stipulated that villagers shall not occupy cultivated land for building houses and the area of the village land for housing were prescribed. However, due to the lack of effective follow-up control measures, the area of houses built by villagers far exceeds the regulations, and a large number of scattered residential spots have been formed. The control effect was not satisfactory. (Geng Hui Zhi article)

2.3. Regional urban – rural coordination stage

In the 1990s, villagers built houses dispersedly on the basis of original natural villages. The village settlements' scattered layout is not conducive to the infrastructure construction, it is difficult to meet the needs of large-scale agricultural production. Therefore, Shanghai Municipal Government put forward "Three Concentrations" strategy, namely, "Concentration of residences in cities and towns, concentration of industries in parks, and concentration of farmland in large-scale operation", which initiated the planning of central villages and improved the village's supporting facilities and public space construction, forming a relatively concentrated "block-like" layout.

In 2003, the central government put forward the development requirements of "Urban and Rural Coordination", which mainly includes economic and social aspects. The main purpose of this stage is to eliminate urban-rural dualistic economic structure, improve quality level of social security, infrastructure and public services in rural area. But the attention paid on agricultural and ecological space was quite insufficient. The control efforts were also relatively weak. At this stage, the management and control of rural construction is mainly dominated by planning department, and there is no effective connection among transverse departments such as land, housing, water conservancy, environmental protection and forestry. The overall management and control effect was moderate. (Geng Hui Zhi article)

2.4. All-element-and-territorial comprehensive regulation stage

After 2014, as China's economic and social development has entered the "new normal", the country's economic growing pattern has changed from previously high-speed growth to medium-to-high speed growth. Shanghai is also facing many opportunities and challenges in urban development. In 2015, the scale of Shanghai's construction land reached 3071 km², accounting for 45% of the city's land area, far exceeding the level of other global cities such as New York and London. In 2019, the permanent population of Shanghai has reached 24.18 million, making itself one of the most populous cities in the world. (Zhuang Shaoqin article)

In order to achieve healthy and sustainable urban development, deal with increasing population, resource and environmental constraints, lack of development motivation and other challenges, "Shanghai 2035" put forward that, in 2035, the permanent population of Shanghai will be controlled at around 25 million, and the total construction land size will not exceed 3,200 km². "Total lock-in and connotation growth" has become the main task of planning and control of urban and rural construction land in Shanghai during the new era. In 2018, Shanghai issued "Shanghai Rural Planning Guidelines (Trial)" to build a planning system for the city's rural areas, namely, village layout planning, countryside unit planning, and village design. As the initiative and characteristic plan of Shanghai, the "Countryside Unit Planning" has gone through three editions since it was firstly proposed in 2012.

From the planning system perspective, The town master plan and the town-level village layout plan are the direct upper plan of the rural unit village planning. Countryside unit village planning is a plan that realizes the integration of multiple plans at the town and village level, a multi-village plan, providing superior guidance to the next level of "village design" that controls the spatial order and landscape of a single village, also providing planning basis for rural construction projects and land supply. (Transformation under the background of rural revitalization, Ju Xiaoting)

The countryside unit planning in Shanghai has changed from initial 1.0 and 2.0 versions in order to solve multi- plans -in-one, comprehensive land management, the reduction of construction land and other issues as the main purpose, to current 3.0 version, a comprehensive, coordinated, and implementation plan covering rural areas and coordinating all elements of the whole land. The logic behind those is under the same strain focusing on issues of countryside land use, natural resource management and protection, industrial development, farmers' life quality, style guide and other issues, also focusing on the conductivity and implementability of planning. (Under the revitalization of rural background Country unit, Songjiang case)

Shanghai as one of the most economically developed regions in China, the urbanization rate of permanent population has reached 88.10% in 2019 (statistics in 2019), ranking first in China. Urban and rural residents in Shanghai have basically completed the integration and transformation in most aspects of household registration, social security, employment, medical care and education. (Retrospect and Prospect of Rural Urbanization in Shanghai) From the development process of rural planning in Shanghai, we can see that, the planning hierarchy has gradually become clear, and the content has expanded from a single construction control to comprehensive management and control of all elements and area of production, life and ecology , as the initial special planning transited into latest comprehensive planning. The implementation of the plan combines rigidity and flexibility, and the policy mechanism has been gradually improved. Although the rural planning and construction in Shanghai has certain regional uniqueness, it still plays an important and exemplary role during the construction of the country's rural planning system.

3. Rural construction in Shanghai suburbs under the dual drive of rural revitalization and new urbanization - the case of Zhangyan

Qingpu District in Shanghai is located in the western part of the city, close to Jiangsu and Zhejiang provinces. With the two national strategies of Shanghai Hongqiao Business District International Open Hub and Yangtze River Delta Ecological Green Integrated Development Demonstration Zone landing in Qingpu, as the west one of the two wings of Shanghai's spatial development, Qingpu will take up a new mission. (Qingpu District 14th Five-Year Plan) The rural revitalization project of Zhangyan Village is an important sub-project of the new urbanization of Chonggu Town and a pilot project of rural revitalization in Qingpu District. The project covers agricultural industry upgrading, ancient village restoration and protection, and new rural construction, with a total investment of 500 million and covers an area of 1.99 km², involving 128 acres of ancient villages.

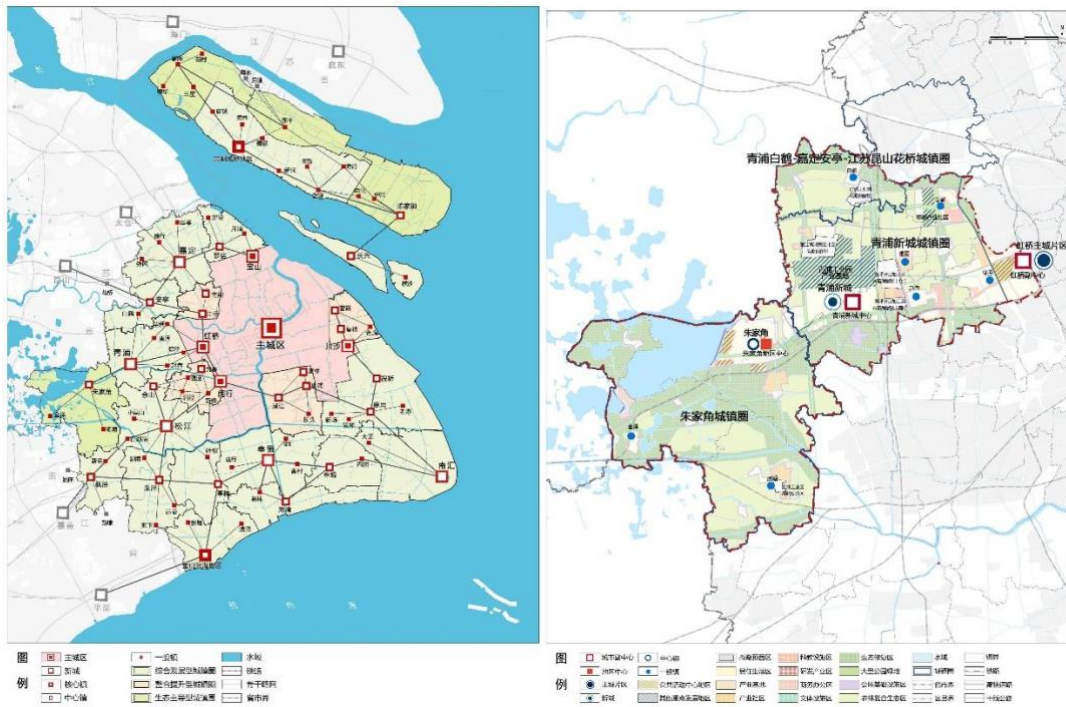


Figure 2. Shanghai 2035 Qingpu District planning (from: 首页_上海市规划和自然资源局 (sh.gov.cn))

3.1. Basic situation of Zhangyan

Zhangyan is located in the northwest of Chonggu Town and northeast of Qingpu District. It is about 30 km to the east from the center of Shanghai, about 15 km from Hongqiao Comprehensive Transportation Hub, located within its 30-minute core radiation circle, about 13 kilometers from Hongqiao Business Circle and the National Convention and Exhibition Center, and about 6.5 kilometers from Huijin Station and Zhaoxiang Station of Rail Transit Line 17. Zhangyan is also one of the representatives of Fuquanshan culture, the birthplace of Shanghai's ancient culture, and was named Zhangyan Village after the famous politician and thinker in Song Dynasty, Zhang Yingyan (jié) who dredged and built a weir there. This ancient village with a thousand-year story was once prosperous, with grain, rice and silk stores, tea houses and restaurants, and was known as the "Golden Zhangyan". The village was mentioned in the poems and writings of famous scholars such as Zhang Yao, Su Shi, Ren Renfa and Mi Fu. With its rich cultural history, water features, rural scenery and humanistic tourism resources, and the surrounding resources such as Dianshan Lake, Zhujiajiao, Songjiang Sheshan area and Hongqiao Hub, the whole Hongqiao West Area has the effect of creating a tourism cluster in the west area of Shanghai and is endowed with innate tourism development potential.



Figures 3-6. Qingpu's regional and traffic analysis

The village has a total area of 1.99 km² with a registered population of 1,395 and a resident population of 2,022, of which 499 are foreigners and 456 are over 60 years old. The total workforce of the village is 799, of which 203 are non-agricultural workers. The majority of the population lives in the three villages of the town, Zhangyan, Sunlian and Tongshanqiao. The foreign population is mainly renters and the village's main industry is agriculture. In this presentation, we will introduce the key points of planning and construction of the model village in Zhonggu Town, which is a natural village in the core area of Zhangyan.

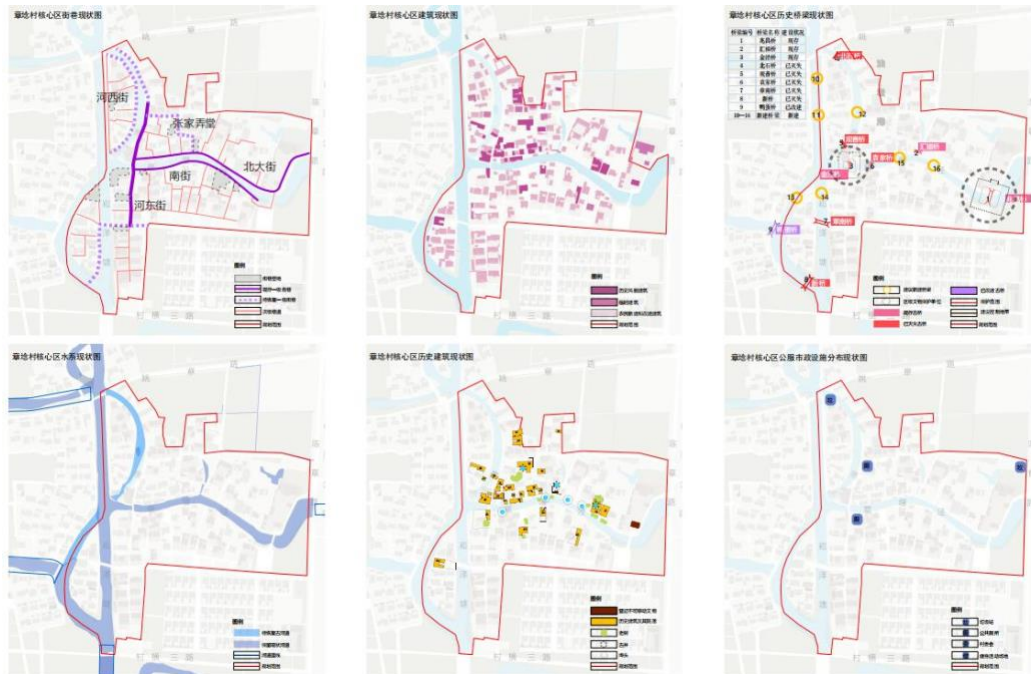
Zhangyan as a city-level traditional village in Shanghai, is rich in historical resources and cultural heritage. However, the village is located at the edge of the cultural and tourism industry sector in Chonggu Town, with a weak economic base, loss of water culture, historical decline, lack of special products, low income of farmers, and urgent need for infrastructure improvement.

At the end of 2015, Qingpu District Government authorized Chonggu's Government to sign the Cooperation Contract of PPP Project of New Urbanization with China Construction Consortium. The project will adhere to the concept of urban-rural integration, industry-city integration and smart town, combine with the construction of model villages of the beautiful countryside program in China, take planning as the leader, make the new urbanization PPP project of Chonggu Town develop into a "national new urbanization demonstration area, a model of Jiangnan new water township construction, and a demonstration window of Shanghai urban-rural integration construction".

In May 2021, Shanghai Municipal Bureau of Planning and Resources selected Zhangyan Village as the first rural community living circle pilot. With the support of Qingpu District Bureau of Planning and Resources, Municipal Planning Institute and Zhonggu Town Government, a comprehensive research, mapping of current situation, basic needs of different subjects and travel characteristics of resident villagers was conducted through questionnaires, surveys and big data methods. On top of that, we conducted in-depth analysis and research on development trend and demanding characteristics of Zhangyan Village,

combined with the existing plannings to find key solutions to solve main problems and then, set visionary goals. The positioning of three rural community living circle scenarios in Zhangyan Village, namely

neighborhood friendliness, headquarters services and innovative production, was finally determined. A blueprint and a short- and long-term action plans were also clarified. In July, the "Pilot Action for Rural Community Living Circle in Zhangyan Village, Qingpu District" was basically compiled, providing a clear path for the development of Zhangyan Village.



Figures 7-12. Zhangyan's present situation analysis

3.2. Zhangyan Planning and Development Strategy

3.2.1. Overall Planning Ideas and Positioning

In the context of Shanghai's overall goal of building a "global city of excellence" and the dual strategies of new urbanization and rural revitalization, the overall planning goal of Zhangyan is on regional basis, taking advantages of Qingpu District's position as an international open hub in Hongqiao Business District on the west wing of Shanghai, relying on its own historical and cultural features of the ancient town, and seizing the opportunity of CSCEC's industrial upgrading and globalization strategy. Under the opportunity of industrial upgrading and globalization strategy, we insist on "industry + culture, science and technology + art" to establish an innovation center for science and technology enterprises, a sharing center for ecological synergy, a social university for entrepreneurship and innovation, and a showcase center for high-tech agriculture, with science and innovation as the core line. It strives to meet five policy-oriented goals, including: a national comprehensive demonstration zone for new urbanization, a demonstration zone (window) for urban-rural integration practices in Shanghai, a dual demonstration zone for ecological civilization and new urbanization, a model for the construction of a new water township in Jiangnan, and a demonstration base for ecological agriculture in Zhangyan.

In the future development, Zhangyan tries to explore a new urban-rural integration model. Zhangyan is only 9km away from the new urban area of Qingpu, and is connected to Shanghai Hongqiao international opening hub in the east and Yangtze River Delta ecological green integrated development demonstration area in the west, and at the same time, it has been selected as the third batch of rural revitalization demonstration village construction project in Qingpu District, Shanghai.

Based on the comprehensive analysis of the conditions of Zhangyan and the assessment of the development resources of the village, we adopt the development concept of "urban-rural sharing and

Surrounding Connecting " to extend the rural tourism industry chain through joint management and brand operation on the one hand; on the other hand, from the perspective of land ownership, we form an urban-rural land sharing mode through the process of land consolidation and innovation; from the perspective of users, the infrastructure is shared between urban and rural areas; from the perspective of entrepreneurship promotion, the rural tourism industry is promoted, and a mutually beneficial regional linkage mechanism is established to promote the integration between Zhangyan and the surrounding cities.

At the same time, based on its own characteristics of water township and industrial features, Zhangyan will deeply explore the characteristics of its own history, and combine with the opportunity of business expansion of CSCEC to innovate its own cultural and industrial functions, and develop functions such as "technical training, cultural construction, standard discussion and innovation expansion" for domestic and international groups, so as to build trade, tourism, culture and creative industry integration. It will create an idyllic and humanistic village featuring agricultural landscape, business-tourism revival and wisdom gathering, and shape a new Zhangyan featuring urban-rural sharing and talent gathering.



Figure 13-14. Countryside unit planning of land and industry including Zhangyan

3.2.2. Industrial Development

Among the general requirements of "prosperous industry, ecological livability, rural civilization, effective governance, and affluent life" proposed in the national rural revitalization strategy, "prosperous industry" and "affluent living" are the primary content of rural revitalization. In 2019, China Construction Group Corporation (CSCEC) signed a strategic cooperation framework agreement with Shanghai Municipal People's Government, and a deeper cooperation agreement with Qingpu District. According to the strategic cooperation framework agreement, CSCEC and Shanghai will strengthen cooperation in major projects, scientific research and cutting-edge business, further establish regional headquarters in Shanghai, build industrial platforms, scientific and technological research and development platforms, and jointly promote the construction of "five centers" of Shanghai, Lingang new area of Shanghai Free Trade Zone, and the model area of ecological and green integrated development of Yangtze River Delta.

Zhangyan seizes the advantages of its location near Hongqiao hub and the western part of Qingpu District, aims at the main problems of Zhangyan's weak economic foundation and lack of special

products, and proposes an industrial planning layout of "1+4+2", namely, 1 agricultural base, 4 core industries and 2 special products. With the construction of Zhangyan Ecological Agriculture Demonstration Base as "1 agricultural base", the organic renewal of villages with special features as an opportunity to innovate a new model of "agriculture +" diversified industrial development, It will focus on the development of 4 types of core industries, such as business meeting, leisure agriculture and tourism, cultural creativity, rural entrepreneurship incubation, and 2 types of special products, such as technical training and standard research and development.

In terms of the 4 core industries, Zhangyan relies on the development of Shanghai business center function to create a central business meeting industry. Deeply excavate and condense the historical and cultural essence of the thousand-year old town of Zhangyan and the characteristics of Jiangnan water town, provide comprehensive service industries such as sightseeing, leisure and idyllic agricultural tourism, cultural industries aiming at spreading traditional Jiangnan culture, modern Chinese culture and common global civilization, and focus on promoting the development of derivative industries such as IP creativity, artwork design and cultural promotion. Based on the unique humanities and geography of water township, new functions such as industrial incubation and venture capital are introduced to actively attract people going back to their hometowns to start their own businesses and create a rural business incubation industry.

In terms of creating two types of special products, Zhangyan relies on CSCEC's overseas strategic expansion plan and focuses on developing product services such as regulations and technical training in "overseas and domestic business expansion areas". At the same time, the Group's Technology R&D Center has been added to take advantage of CSCEC's business upgrading and overseas expansion opportunities to set up and develop the standard R&D function for technical documents.

In addition, according to the National Bureau of Statistics, China's leisure agriculture and rural tourism received about 3 billion visitors in 2018, with a business income of more than 800 billion yuan. (National Bureau of Statistics 2019) In the first quarter of 2021, the total number of visitors received by the country's rural tourism was close to 1 billion, and the total revenue of rural tourism was 389.8 billion yuan, both of which were up from the first quarter of 2019 before the epidemic. (Measured by China Rural Tourism Monitoring Center) At present, the suburban tourism market in Shanghai has developed more categories, and Qingpu District is mainly positioned as "ecological tourism, ancient-water towns, and cultural tourism", and the areas competing with it are mainly three suburban districts with more similar resources, namely Songjiang, Minhang and Jiading in Shanghai. Through product analysis and development comparison, Zhangyan Village can introduce medium-to-high end, purpose-oriented and consumption-oriented businesses, and differentiate its position from the surrounding area for staggered development.



Figures 15-16. Functional zone and business format planning of Zhangyan

Taking advantage of the trend of continuous high demand for rural tourism in Shanghai in recent years, we can apply "tourism +", "ecology +", "technology +" and other models to promote agriculture by taking advantage of the unique advantages of Zhangyan's rich collection of various material and immaterial resources. " and promote deep integration of agriculture, forestry, tourism, education, culture, recreation and other industries. Zhangyan needs to focus on planning pull, activate rural tourism vitality, play a better role in north-south linkage of Chonggu-Zhangyan, and in east-west linkage of Shanghai-Changzhou economic belt, enhance the competitiveness of rural tourism, and strengthen the attractiveness of rural tourism.

3.2.3. Historical Preservation and Heritage Development

In the face of the contradiction between historical preservation and modern development, the village planning of Zhangyan, on the one hand, respects the prosperity of local culture of Zhangyan in history, and on the other hand, acknowledges the decline and decay of the village exemplified by Zhangyan in recent times. It recognizes that the village itself has a cycle of creation, improvement, renewal, and development. The development plan of Zhangyan is a critical reconstruction based on the past development, responding to the changes of the times, and at the same time looking to the future, with contemporary design thinking based on a full review and evaluation of the historical remains of Zhangyan.

In terms of spatial structure and function, in response to the current resource characteristics of Zhangyan, a planning model is adopted for the preservation and renewal of traditional neighborhoods, also the development and construction of new towns. The spatial function takes over the layout of the four core industries, preserves the original traditional street pattern and water network pattern of the historical village, and uses its surrounding natural environment to carry out chronological and progressive retrofitting.

In terms of specific planning and design methods, we adopt "combing", "refining", "sewing", "mending" and other positive method to step in traditional village space order, reconstruct the growth path of the traditional village space, coordinate the relationship between village inheritance and development, , and realizes dynamically organic inheritance of Zhangyan's tradition. Traditional streets and alleys have been dredged, ground system has been improved, traditional landscape of the waterfront spatial skeleton has been reproduced. The street axis is highlighted. It has traced the water line and commercial characteristics in the heyday of Zhangyan, sorts out the environmental characteristics of the village,

continues and develops the historical and cultural heritage of the new water village, also sets up landscape nodes and tour activities along the water tour route.

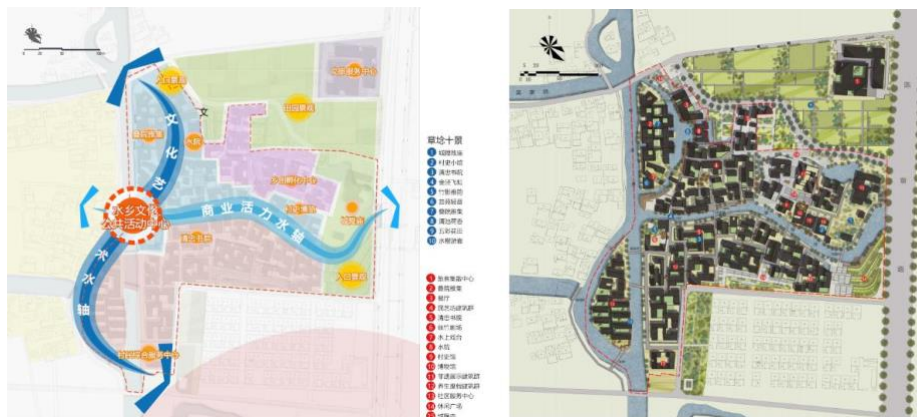


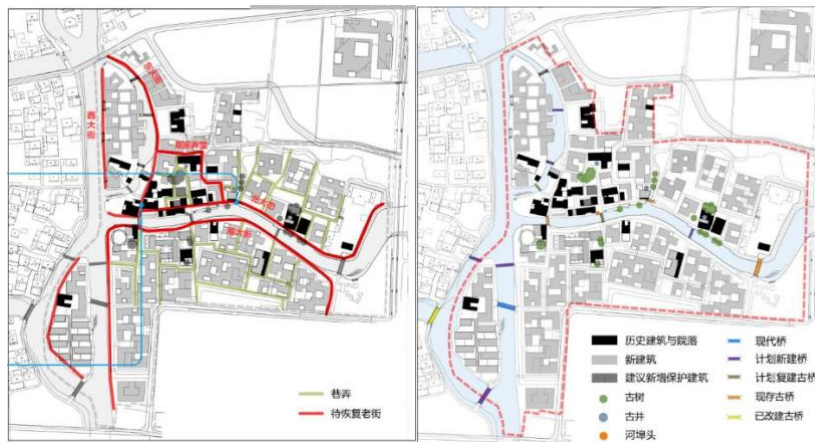
Figure 17-18. Master plan and Spatial structure analysis of Zhangyan

Based on water town's unique cultural characteristics of Zhangyan, a three-dimensional, networked and complex landscape structure system will be built with the theme "water as the bone, road as the pulse, and culture as the soul", and the planning integrates cultural elements and values into functional zoning as well as business planning. In response to the major national strategies and development needs of rural tourism industry in new era, the plan also focuses on the characteristics of rural tourism in the context of new urbanization, the impact and interaction mechanism of the strategies on rural tourism, also the restoration and reconstruction of rural culture and nostalgic memory.

In the renovation design of key buildings and courtyards, a small-scale and gradual renewal approach is adopted, adopting the concept of "renewal cells", taking the courtyards composed of protected buildings and their outdoor gray spaces as units, tapping their development potential, introducing new functions such as commerce, catering and tourism services, etc. Two major centers are set up in the area: the north side is combined with the tourism service center to form a cultural and tourism service center, and the south side is combined with the villagers' service center to form a village public service platform. The planning focuses on the combination of modern commerce with village public services and villagers' cultural activities to create a village colony with common memory.

Although Zhangyan has a history of 1,000 years, it has been gradually weakened by the removal of the district and consolidation of township in 1957, coupled with the expansion of the riverway in the 1970's. Only 3 ancient bridges and wells, a river port and a small number of ancient trees remain in this original water township. The formerly prosperous streets and bazaars have shrunk considerably. Most of the twenty or so old halls left over from the Ming and Qing dynasties have fallen into disrepair. Only a town god's temple at the entrance of the village has been left to continue the incense. The plan firstly composes historical features of the ancient village, restores the ancient river channel and three ancient bridges of Songze Pond according to historical documents and local records, preserves historical district with more concentrated and well-preserved streets and old houses to reproduce historical life scenes, also restores and renews more than 30 historical buildings, aiming at restoring the prosperous water town style. Based on the fact that most of the old houses left behind are in different degrees of decay, their protection and renewal strategies are different, mainly divided into four modes: heritage repair, rebuilding and modification, restoration and transformation, and off-site reconstruction. We tend to take into account the principles of overall coordination and detailed identification, as well as respecting different morphological characteristics and transformation processes of the objects in different historical periods and cultural contexts, adopting a dialectical historical view and values to identify and protect them. For example, the big hall of Zhang's family, was built in the late Qing Dynasty as a two-story wooden structure, which was once used for commercial purposes, and then there were brick and

concrete additions of different styles and forms on the north side of the house. This addition is preserved and reorganized in a tolerant manner in its retrofitting design.



Figures 19-20. Historical elements remain and unblocking historical streets of Zhangyan

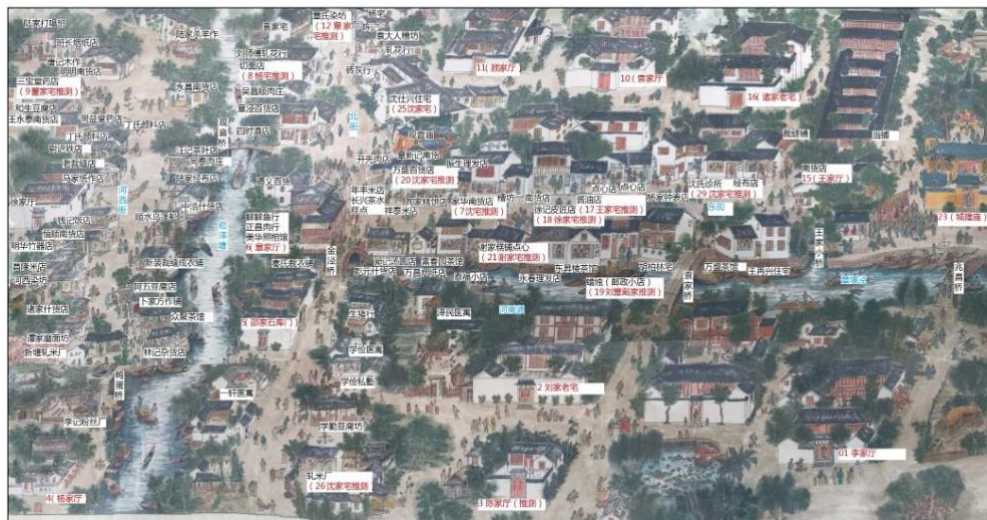
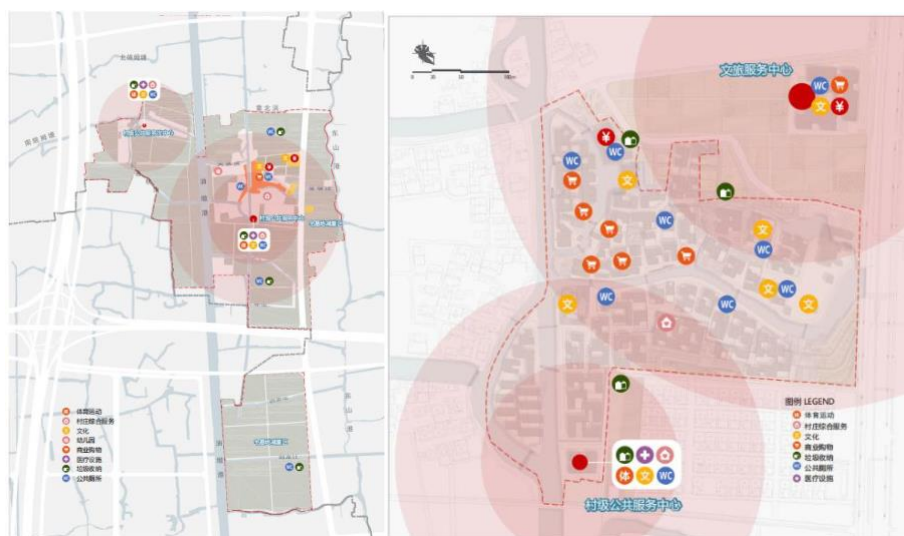


Figure 21. Historical style and scenery of Zhangyan (From: local chronicles)

During the project of neighborhood-friendly scene shaping, for better serving all-age village residents, combining with the current situation of aging population and high number of children in the village, we implant functional facilities such as neighborhood stations, convenience stores, senior activity rooms, children's homes, gardens, squares, and party service stations, while maintaining the original architectural landscape and ecological environment of the village, to provide a rich infrastructure coupled with children, youth, and elderly demand characteristics. The planning also create an integrated village activity center with all-age friendly functions as well as good neighbor facilities. The community center is not only the office of the village committee, but also provides rich activity space, community canteen, medical care, and community one-stop services for villagers. Combined with a variety of regular and scheduled activities, it creates a friendly and mutually beneficial village community for all. The Talent Service Center, as the core institution of the headquarters service, will become a comprehensive platform base integrating international talent training, internship practice, vocational skills training, high-end think tank, and industry-academia-research cooperation.



Figures 22-23. Public service infrastructure planning of Zhangyan

3.2.4. Operational Implementation

The key to the successful operation of Zhangyan Village lies in how to attract the target clients, including urban middle class, convention and exhibition business people, leisure and vacation people, and to create special IP to form a cluster of clients. While relying on social capital and corporate investment to build the core engine, the revival of Zhangyan requires more than anything else, through operation management and development plans, to stimulate the participation of local farmers, and attach importance to publicity and promotion, to raise the attention and positive action of social elites and outstanding talents to join the construction of the village, to introduce professional operation and management companies and high-quality property management, to continuously improve its own infrastructure construction. By attracting citizens to return to their hometowns, Zhangyan forms an endogenous development momentum and will merge a variety of forces to build a beautiful village together. By introducing CSCEC (Shanghai) New Urbanization Investment and Development Co., Ltd. as a cooperative company, Zhonggu Town has fully designed the architectural space of Zhangyan in accordance with the requirements of the countryside unit planning, and collected the works of 12 contemporary well-known architects, which provides high-quality living facilities for local villagers while laying a good foundation for the development of local cultural tourism industry. The introduction of innovative enterprises, cultural and creative enterprises, talent development center, as well as Dongpoju Hotel, Zhangyan B&B, Yanji Restaurant and duty-free store in the core area of Zhangyan will lead to the expansion of the economic scale of Zhangyan, increase of employment opportunities, rational utilization of idle resources and the increase of villagers' income.

3.2.5 Current Implementation and Development Stage

In 2019, Qingpu District established Rural Revitalization Demonstration Village Construction Headquarters, and Zhangyan was listed as a pilot village for rural revitalization. In April 2020, it was included in the list of Shanghai Rural Revitalization Demonstration Village Construction. In Zhangyan, both the development of ancient village and upgrading of agricultural industry will be carried out, integrating the development concepts of "innovation, coordination, green, openness and sharing", exploring a new model for solving problems of agriculture, rural areas and farmers, and creating a "dual demonstration area of ecological civilization and new urbanization". "It will realize the double-wheel drive of rural revitalization and new urbanization. The ancient village section realizes the renewal through the implementation of re-planning, overall renewal and content injection on the original old village land of 128 acres.

In terms of green ecological agriculture development, Zhangyan has now realized the modernized agricultural production upgrade by centralization, construction of industrial park of agriculture, intelligentization and automatization, launched local organic agricultural products brand through scientific planting, and launched a series of agricultural tourism activities combined with several rural farmland scenes. Local farmers in Zhangyan use biotechnology to ferment food waste, turning waste into valuable fertilizer, and guide other cooperatives, using biotechnology to grow safe vegetables and fruits. The rice fields are put into wild ducks to work together, which helps to protect the ecological environment by reducing pollution through spontaneous ecological circulation. With Fuquanshan farming culture as the feature of the brand, Zhangyan will create a famous brand of organic rice and help promote the sustainable development of green ecology in the countryside. During the May Day holiday in 2021, groups of people came to pick cherries and fresh vegetables at Zhangyan Spring Ecological Agricultural Industrial Park. Zhangyan Science and Technology Agricultural Park improves agricultural production efficiency and controls product quality through intelligent management technologies such as mechanized assembly-line production procedures and Agriculture Cloud Command Center. At present, 100-acre ecological agriculture project here has included duck rice, small cherries and various vegetables. With the improvement of the in-depth experience of agricultural products in the park, it is expected that Zhangyan's agricultural industry park will receive over 3,000 visitors per day since 2022.



Figure 24. Zhangyan's eco-agricultural industry park

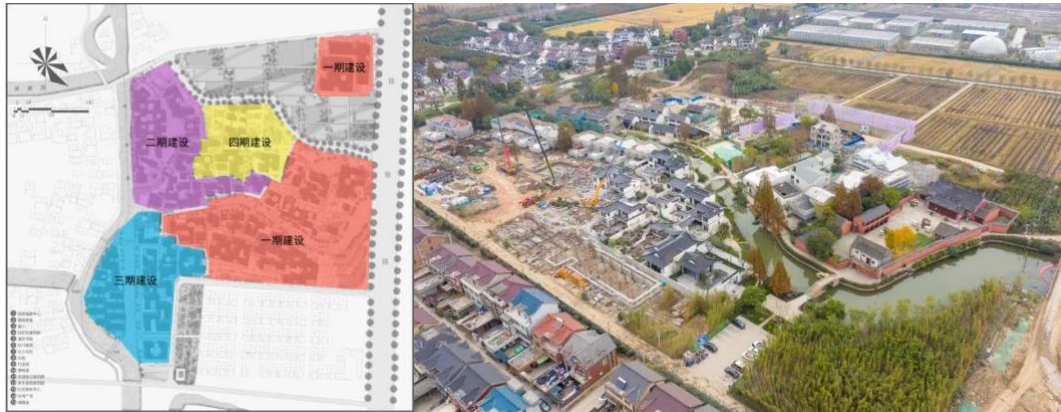
(From: 打造乡村振兴新典范，青浦章堰村一期项目七月开街_街镇信息_新闻中心_上海市青浦区人民政府 (shqp.gov.cn)



Figure 25. Zhangyan 2019 harvest fair

(From: 打造乡村振兴新典范, 青浦章堰村一期项目七月开街_街镇信息_新闻中心_上海市青浦区人民政府 (shqp.gov.cn))

Zhangyan adopts the model of "rolling development and step-by-step implementation" to carry out the planning and projects, which has been divided into two phases with a total construction area of 49,000 m. At present, the first phase is mainly focused on cultural creation and business projects, including renovation of ancient buildings into an artistic neighborhood of water village settlements, which will lead to the revival of ancient villages, and will create the living room of Zhangyan, alleyway cultural business, waterfront neighborhood, coffee bookstore, fashionable restaurants, and B&B (bed and breakfast).



Figures 26-27. Implementation plan and the present construction situation

(From: 打造乡村振兴新典范, 青浦章堰村一期项目七月开街_街镇信息_新闻中心_上海市青浦区人民政府 (shqp.gov.cn))

Up to now, the overall construction rate has been completed by 60%-70%. The construction of Zhangyan Cultural Center and Commercial Street has been completed, the building part of Talent Service Center project has also been finished, and the appearance along both sides of the river has gradually taken shape. Next, Zhangyan intends to introduce famous restaurants with Qingpu characteristics and Chinese version of famous bookstore brand into the area. The waterfront commercial street intends to develop cultural and creative stores, agricultural products display, country club, etc. The second phase of the project, which is located just across the water, is also under construction now, where technology and innovation industries will be brought together to create a "mass-innovation space + community activities", in order to attract more local talents to return to the countryside and build a better hometown together.



Figures 28-30. Training Center of Zhangyan

(From: 打造乡村振兴新典范, 青浦章堰村一期项目七月开街_街镇信息_新闻中心_上海市青浦区人民政府 (shqp.gov.cn))

In 2020, the famous Italian design website Designboom released a list of the world's "Top 10 Museums and Cultural Centers", and four Chinese museums were listed, and Zhangyan Cultural Center was one of them. Zhangyan Cultural Center preserves original Village History Hall, Zhang Family House and other old houses of Qing Dynasty, meanwhile, appropriately creates some new functional buildings. According to the design concept of Ju Bin, the designer of Zhangyan Culture Hall, for historical or old buildings, instead of just knocking down, rebuilding, or repairing the old as the old, it follows the historical lineage of the building itself, puts contemporary design concepts and functional needs into it, and reconstructs a both historical and modern organization layout, functional business mode. This concept of relationship between the old and the new is also the core idea of Zhangyan for future planning and development. Currently, Zhangyan Culture Museum is open to the public for free.



Figures 33-36. Zhangyan Culture Museum

(From: 打造乡村振兴新典范，青浦章堰村一期项目七月开街_街镇信息_新闻中心_上海市青浦区人民政府 (shqp.gov.cn))

Shanghai 2021 Urban Space Art Season will open in October this year, and as one of the pilot rural community living circles of 2021 SUSA, ZhangYan will be open for exhibition and tourism from October to November, with the theme of "Hop! Our Golden Zhangyan!" presenting a village community life circle with friendly neighbors, innovative production and headquarters service scenes.





Figures 37-39. Zhangyan Community Center

(From: 打造乡村振兴新典范, 青浦章堰村一期项目七月开街_街镇信息_新闻中心_上海市青浦区人民政府 (shqp.gov.cn))

The exhibition takes both the old and new villagers of Zhangyan Village as the main body, highlighting the relationship between people and land, linking the development vein with characters, driving the cultural tourism industry with art, and echoing the planning route with activities. Through a series of exhibitions and activities such as 1 map+3 major scenes+3 major events+ 1 forum, the exhibition will show the new face of this ancient village, allowing people to experience the ideal rural community living circle and serve the community development. Ltd. and LeTalwork Culture Company, with the village of Zhangyan as the core, the exhibition will show a new "rural community life circle" which is nice for living, working, traveling, learning and nurturing.



Figures 40-43. Zhangyan in 2021 Shanghai Urban Space Art Season

(From: 打造乡村振兴新典范, 青浦章堰村一期项目七月开街_街镇信息_新闻中心_上海市青浦区人民政府 (shqp.gov.cn))

3. Summary

Since Shanghai clarified the ideas, goals, steps and measures for implementing the rural revitalization strategy of the whole city in 2018, it has put forward the timetable and roadmap for the promotion of rural revitalization in a project-oriented manner, and clearly implemented various key initiatives by promoting the project named "Beautiful Homeland, Green Field and Happy Paradise". A system of institutional framework for the implementation of rural revitalization strategy, with planning as the leader, policies as the support and projects as the basis, has been initially formed. By 2020, the transformation of villages in Shanghai's basic farmland protection areas and planned reserved rural areas has been basically completed, with the project covering 1,026 administrative villages and benefiting 760,000 farm households. The city has rated a total of 94 municipal-level model villages from 2016 to 2019. In 2018, the creation of model villages for rural revitalization was launched and a total of 69 villages were included in the construction plan, of which 37 villages have completed the construction tasks as scheduled. (Notice of the Shanghai Municipal People's Government on the Issuance of the "14th 5-Year Plan" for the Revitalization of Shanghai's Countryside)

The core of new urbanization lies not in sacrificing agriculture, food, ecology or environment quality, but in realizing the integration of urban and rural infrastructure and equalization of public services, promoting urban and rural economic and social development, focusing on farmers and covering rural areas, in the end realizing common prosperity. The planning and development of Zhangyan is based on its own resource endowment and industrial base of the region and the village itself. With agriculture as the base, business, culture and rural industry incubation as the traction point, by improving the service level of its own soft and hard facilities, Zhangyan will attract more urban target customers, which in turn drives sightseeing agriculture, leisure agriculture, organic agricultural products planting and sales, drives the surrounding villages to take the road of modern agriculture, finally attracts villagers to return to their hometowns. The planning and development of Zhangyan Village combines the integration of culture, ecology and industry, fully explores the characteristics of this small town, and follows the historical development and cultural lineage, places the current needs and functions in the village, and has made great efforts to realize multi-dimensional development of "science and innovation", "humanities", "ecology" and "leisure". to reproduce a new ecological colony of symbiosis and co-creation, realize two-way flow of resources between urban and rural, achieve equal value of urban and rural areas, truly realize the revitalization and modernization of the countryside. After historical changes, under the background of new urbanization policy, Zhangyan, the thousand-year-old village, will usher in a new revival and development.

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