

## Research on Anhui Digital Village Construction from the Perspective of Yangtze River Delta Integration

Yuan Guo<sup>1</sup>, Mengran Zhang<sup>2</sup>, Jie Yang<sup>3</sup>, Yi Zhang<sup>4</sup>

<sup>1</sup>School of Economics, Anhui University of Finance and Economics, Bengbu, China

<sup>2</sup>Anhui University of Finance and Economics College of Arts, Bengbu, China

<sup>3</sup>School of Statistics and Applied Mathematics, Anhui University of Finance and Economics, Bengbu, China

<sup>4</sup>School of Finance, Anhui University of Finance and Economics, Bengbu, China

### Abstract

Against the backdrop of the ever-accelerating process of global integration, China is actively integrating into the world market and promoting the development of globalization. China established the Yangtze River Delta urban agglomeration in 2003, and has carried out five integrations successively, covering Jiangsu Province, Zhejiang Province, Anhui Province and Shanghai City. As the leader of the country's economic development, the Yangtze River Delta region supports the vigorous development of my country's economy, drives my country's import and export trade activities with other countries, and promotes my country's better access to the world market and occupies a place.

### Keywords

Yangtze River Delta Integration; Anhui; Digital Village Construction; Mechanism Research.

## 1. POLICY BACKGROUND

At the end of 2019, the "Outline of the Yangtze River Delta Regional Integration Development Plan" (hereinafter referred to as the "Planning Outline") issued by the Central Committee of the Communist Party of China and the State Council announced the re-integration of the Yangtze River Delta region. This unprecedented large-scale integration will integrate 16 cities in Anhui Province Completely incorporated into the planning system of the Yangtze River Delta, Anhui Province has ushered in new opportunities and challenges. In this "Outline Plan", the regional scope of the integrated development of the Yangtze River Delta region, the strategic positioning and development goals of each province and city have been further determined, providing more detailed and specific guidance for the future development of the Yangtze River Delta region. In order to effectively promote the implementation of the "Planning Outline", the Anhui Provincial People's Government issued the "Action Plan for the Implementation of the Yangtze River Delta Regional Integration Development Plan in Anhui Province" in early 2020 based on the actual development of Anhui Province's politics, economy, and culture. The 9 major strategic tasks have been detailed and implemented, 216 key tasks and 30 major projects. At the same time, Anhui Province insists on the leading role of Shanghai. The development of emerging industries, while always adhering to the green development path, promoting the deep integration of urban and rural areas, and narrowing the gap between urban and rural areas, so as to promote the high-quality economic development of the entire Anhui Province, and strive to create a new

situation in the construction of the five major developments of modernization and beautiful Anhui. At the beginning of 2022, the "2022 Work Points of Anhui Province to Promote the Integrated Development of the Yangtze River Delta" was issued. The document indicates that Anhui Province will focus on regional coordination, technological innovation, cooperation and opening up, digital rural development, infrastructure construction, and convenient sharing of public services. In order to further promote the smooth implementation of the integrated development strategy of the Yangtze River Delta. The continuous implementation of national policies shows that my country attaches great importance to the development of the Yangtze River Delta region, and also provides a solid political foundation for the development of the Yangtze River Delta region.

## 2. LITERATURE REVIEW

Liu Naiquan et al. (2017) found that the integration of the Yangtze River Delta in 2010 had a promoting effect on the economic growth of the entire digital village group; Zhao Lingdi (2019) pointed out that the integration of the Yangtze River Delta should aim at the two-dimensional integration of the economic environment, and the integration policy The formulation and implementation should fully consider the coordinated development of the economic environment. From the above scholars' research on the integration of the Yangtze River Delta, it can be seen that most scholars regard the integration of the Yangtze River Delta as a quasi-natural experiment, and use qualitative or quantitative analysis methods to influence the economic development and environmental effects of the integration of the Yangtze River Delta. research. This topic is based on the research results of various scholars, combined with the integration policy of the Yangtze River Delta under the background of the new era, explores the path of Anhui's digital village construction from multiple perspectives such as politics, economy and culture, and draws scientific conclusions.

As the forerunner and key policy of regional integration, the integration policy is a necessary means to break through the barriers of regional and municipal divisions, and it is also a key means to realize the construction of digital villages in Anhui. Domestic and foreign academic researches on the regional integration of the Yangtze River Delta mainly focus on the two aspects of environmental effects and economic development. Few scholars pay attention to the impact of the integration of the Yangtze River Delta on the construction of digital villages in Anhui, ignoring the high-quality development of the innovation-driven economy. Under the international situation of development, the Yangtze River Delta integration policy has a major impact on the construction of digital villages in Anhui.

## 3. THE STATUS QUO OF COMPREHENSIVE DEVELOPMENT OF REGIONAL INTEGRATION OF DIGITAL VILLAGES IN THE YANGTZE RIVER DELTA

### 3.1. Leading economy and rapid development

The economic strength of the Yangtze River Delta region is strong, supporting the vigorous development of my country's economy. As the leading city, Shanghai has led the three provinces of Jiangsu, Zhejiang and Anhui to follow closely behind. Between regional digital villages, resources are exchanged, policies are mutually beneficial, and the integration process of the Yangtze River Delta is promoted. During the epidemic, the Yangtze River Delta region even played a leading role, activating the market economy, driving economic recovery, and greatly reducing losses.

Relevant data show that since 2010, the Yangtze River Delta region's GDP has accounted for about a quarter of the country's total, and its total import and export volume has steadily accounted for one-third of the country's total. This also clearly shows that the Yangtze River

Delta region has contributed a lot to my country's economic development and occupies an important position.

### **3.2. Co-innovation and collaborative development**

Innovation is the source of development, and the digital villages in the Yangtze River Delta region also pay attention to technological innovation, using technological innovation to activate market potential and tap more development space. According to the data, in 2020, Shanghai is the digital village with the TOP1 number of high-tech enterprises in the Yangtze River Delta, and it deserves to be the leading digital village in the Yangtze River Delta region. It is not difficult to see that since 2018, the growth rate has continued to increase. In 2020, the number of high-tech enterprises in the Yangtze River Delta region has reached 73,615, which is nearly 20 times that of 2013. This year, the country has vigorously promoted the development policy of the Yangtze River Delta, promoted the integration of the Yangtze River Delta region, and activated the innovation capabilities of the digital village.

### **3.3. Close connection and reasonable division of labor**

The coordinated development of the digital villages in the Yangtze River Delta, resource sharing, close connection, and a good development trend. Good industrial layout planning, industrial distribution pattern, and industrial quantity matching can greatly promote the economic development of digital villages and build a circular model of industrial development. As can be seen from the figure below, the distribution of different industries of high-tech enterprises in the three provinces and one city of the Yangtze River Delta is relatively balanced, and the producer service industry in Shanghai is well developed, ahead of the manufacturing industry and other industries. Jiangsu, Zhejiang and Anhui provinces are relatively leading in manufacturing. In comparison, the manufacturing and producer services in Jiangsu Province are higher than those in other regions in the Yangtze River Delta. The manufacturing industry, producer service industry and other industries in Anhui Province have room for further development.

### **3.4. Perfect facilities, interoperability and win-win**

The digital villages in the Yangtze River Delta have stepped up infrastructure construction to ensure high-quality economic development. The infrastructure construction in the Yangtze River Delta region is conducive to the sharing of resources among digital villages and the realization of interoperability and win-win results. The Yangtze River Delta region actively responded to the national policy call. The implementation of the national strategy has achieved considerable results. Among them, Anhui Province has made great contributions to the transportation interconnection of the Yangtze River Delta.

In the promotion of existing infrastructure construction, adjust the structure, make up for shortcomings, optimize and upgrade. It also focuses on the construction of new informatization and intelligent infrastructure to provide a solid foundation for the integrated development of the Yangtze River Delta.

### **3.5. Emphasis on resources and environmental protection**

Economic development needs to be developed in coordination with the environment, and the long-term benefits that environmental resources can bring should not be ignored because of the short-term benefits brought about by economic development. In order to realize the green development of the economy, the Yangtze River Delta region has made great efforts to improve the environment, reduce pollution and improve the environment. Many digital villages are also actively promoting knowledge about environmental protection and the concept of green travel, with the aim of raising the awareness of environmental protection among the people and remediating environmental pollution from the source.

In recent years, the environmental governance effect in the Yangtze River Delta region has been good. According to data, the average concentration of PM<sub>2.5</sub> in the Yangtze River Delta region in 2021 will be 31 micrograms per cubic meter, which is a decrease compared to 2020. The average proportion of good days in the Yangtze River Delta region is 86.7%, an increase of 1.6 percentage points compared to 2020.

### **3.6. Focus on people's livelihood and improve services**

A happy life for the people is the goal of national development. The country is tirelessly implementing corresponding strategic policies for this goal. Since 2022, my country has entered an aging society from an aging society, and the number of elderly people has increased dramatically, which will undoubtedly bring pressure to the development of the region. In this regard, the Yangtze River Delta region actively responded to the national pension welfare policy, adapted measures to local conditions, implemented a new pension service model, improved medical infrastructure, and built a good pension service system.

## **4. DIFFICULTIES IN INTEGRATING THE INTEGRATION POLICY OF THE YANGTZE RIVER DELTA AND THE DEVELOPMENT OF DIGITAL VILLAGES**

At present, 40 years have passed since the reform and opening up. After 40 years of development, the development of the Yangtze River Delta region has made many achievements in various fields such as textile materials, automobiles, artificial intelligence, and biopharmaceuticals. It has also formed a considerable scale, but the development of these industries can only be said to have a considerable status in China. However, compared with world-class industrial clusters, the industrial development of the Yangtze River Delta still has many shortcomings. These problems lead to long-term development. The gap between the development of triangular industries and world-class industries is still very obvious. There are many factors that restrict the development of the industry. The following are the four aspects of population, economy, society and ecology:

### **4.1. Accelerated population growth**

The population problem is an important issue in the development of digital villages. The economic development of a digital village must be based on a certain amount of labor force, so the development of digital villages will inevitably face population problems. As a member of digital rural residents, we are both producers and consumers. During the integrated development of the Yangtze River Delta region, we have created many employment opportunities and attracted a large number of labor forces outside the Yangtze River Delta region. The large influx of labor forces has led to the rapid development of the Yangtze River Delta economic circle, and the current economic aggregate has even ranked first in the country. However, the rapid economic development has also gradually revealed the population problem. As more and more people work and settle in the Yangtze River Delta region, the environmental capacity of the region has declined rapidly, and the rapid growth of population has caused a series of problems in housing, medical care, education and other aspects. Because the migrant population needs a house to live in when they come to work in the Yangtze River Delta region, and if the existing houses are not enough, they need to requisition cultivated land for real estate development. When people's employment is stable, most of the labor force will choose to settle in the Yangtze River Delta region, which is convenient for future development. Life and work will involve a series of education and medical problems. In addition, industrial development also requires a large amount of land to build factories. Coupled with the pollution problems in the process of industrial development, the green area of digital villages is gradually decreasing, and the ecological environment is getting worse. . With the passage of time, the land with the same area needs to accommodate the doubled population, which leads to the increasingly

prominent problem of digital village population, which hinders the further development of digital village to a certain extent.

#### **4.2. The economy needs to be developed**

Judging from the respective economic operations of Jiangsu, Zhejiang, Shanghai and Anhui in 2021, Shanghai will complete a GDP of 4,321.485 billion yuan in 2021, Jiangsu will complete 1,1636.42 billion yuan, Zhejiang will complete 7,351.6 billion yuan, and Anhui will complete 4,295.92 billion yuan. In 2021, the national GDP will be 114,367 billion yuan. Therefore, in 2021, the proportion of the GDP of the Yangtze River Delta to the national GDP is about 24.13%, 3.78% in Shanghai, 10.17% in Jiangsu, 6.43% in Zhejiang, and 3.76% in Anhui. From the data, we can see that Shanghai, as the only digital village in the Yangtze River Delta region with a GDP exceeding 4 trillion yuan, has an economic strength that is beyond the reach of other digital villages in the Yangtze River Delta; for Jiangsu Province, the GDP of the Yangtze River Delta region in 2021 There are 8 digital villages with a value exceeding one trillion yuan, and Jiangsu occupies 4 of them. Suzhou's total GDP in 2021 will be 2,271.83 billion yuan, second only to Shanghai; Hangzhou, the capital of Zhejiang Province, will achieve a regional GDP of 1,810.9 billion yuan in 2021 Yuan ranks third, and the Hangzhou area is at the forefront of the country in terms of medical care, education, and scientific research; finally, for Anhui Province, only Hefei will become the only one in Anhui Province with a GDP of 1,141.28 billion yuan in 2021. In addition to the top 10 prefecture-level cities in the Yangtze River Delta, there are no digital villages from Anhui in the top 20.

#### **4.3. Uneven social development**

There is a large gap in economic development in the Yangtze River Delta region. Generally speaking, as the leader in the development of the Yangtze River Delta region, the Shanghai region is far superior to other provinces in terms of economic quality. Zhejiang and Jiangsu rely on their own development advantages and the spillover effect of Shanghai's economic development, and their economic aggregates are also expanding. Anhui Province has joined the Yangtze River Delta for a relatively short period of time, and its economic development is relatively far behind that of Jiangsu, Zhejiang and Shanghai. Moreover, regional development imbalances not only occur among the three provinces and one city, but also within the three provinces and one city. The economic development of southern Jiangsu and northern Jiangsu, western Zhejiang and eastern Zhejiang, and southern Anhui and northern Anhui all have large differences in economic development. Unbalanced regional economic development will affect the healthy development of the Yangtze River Delta region's overall economy, and even intensify the conflicts between people in different regions, causing a series of social problems.

#### **4.4 Severe ecological situation**

The Yangtze River Delta region is at the forefront of my country's digital village development in terms of economic aggregate, degree of opening up, and technological innovation capabilities, and plays an important role in my country's development process. However, high development means high development, and economic development will inevitably lead to increasingly severe ecological environment in the Yangtze River Delta region. Even though environmental problems have been paid attention to, the mechanism for solving environmental problems between regions is still not perfect, and the environmental pollution problems of some digital villages still need to be solved.

### **5. THE DEVELOPMENT AND REVITALIZATION PATH OF DIGITAL VILLAGES IN OTHER AREAS OF THE YANGTZE RIVER DELTA**

Anhui Province has made outstanding contributions and achieved excellent results in the process of promoting the development of the Yangtze River Delta region. Although there is still

a large gap in the economic development of Anhui Province compared with other digital villages, we believe that the people of Anhui Province With continuous efforts, the province's economic aggregate will continue to increase. Therefore, according to the research of Anhui Province on the integrated development process of the Yangtze River Delta region, we propose the following revitalization paths for the development of digital villages in other regions of the Yangtze River Delta region according to the positioning of Jiangsu, Zhejiang and Shanghai in the development of the Yangtze River Delta region.

### **5.1. Serve as the backbone to support the development of the Yangtze River Delta region**

As the backbone of the development of the Yangtze River Delta region, Jiangsu's economic development has always been at the forefront of the country. The economic level has been steadily improving and growing continuously. Its industrial structure has been continuously optimized and it has also made outstanding contributions to the high-tech industry. In the future integrated development of the Yangtze River Delta, Jiangsu should give full play to its own advantages, show its responsibilities in the in-depth development of the Yangtze River Delta, further optimize the industrial structure and resource allocation of the Yangtze River Delta, improve relevant laws and regulations, and relax the system of market access conditions, so as to create a better environment for the Yangtze River Delta region. Make Jiangsu's contribution to market integration, realize policy interoperability among the three provinces and one city, eliminate institutional barriers among resource elements, realize resource interoperability and sharing, and mutual benefit between each other.

### **5.2. Serving as a demonstration zone for digital village construction in Anhui to support the development of the Yangtze River Delta region**

Since Zhejiang Province is a demonstration area for high-quality development and construction of Anhui digital villages in my country, it is enough to show that the prosperity of Zhejiang is the construction of Anhui digital villages for the people of the province. Therefore, Zhejiang should give full play to the comparative advantages of various regions in the province and accelerate the formation of The overall pattern of regional coordinated development of "one bay leads, two wings are improved, four poles radiate, and the whole region is beautiful", contributes Zhejiang's strength to the regional coordinated development of the Yangtze River Delta region through exchanges and cooperation with the outside world. For example, Zhejiang Province can make full use of the markets and resources in Shanghai, Jiangsu and Anhui to encourage enterprises in the province to develop a good relationship of competition and cooperation with industries in surrounding areas, so as to promote mutual growth between each other. Advantages, and actively explore a development path that is more conducive to the characteristics of industrial development in the province.

### **5.3. Act as a leader to lead the development of the Yangtze River Delta region**

Shanghai has always been a leader in the integrated development of the Yangtze River Delta, playing a very important demonstration and leading role. Since the reform and opening up, Shanghai has continuously seized opportunities to develop itself, reflecting Shanghai's spirit of daring to venture and try. Currently , Shanghai has become an international metropolis, so starting from a new starting point, Shanghai needs to further enhance its ability to open up and cooperate with the outside world, improve its financial service enterprise system, and attract foreign investment. Improve its own core competitiveness. At the same time, Shanghai assumes greater responsibilities and missions in the integrated development of the Yangtze River Delta region. It plays its leading role as a central digital village, drives the continuous improvement of technological innovation capabilities of surrounding provinces and cities, and improves related industries. The development of the chain, actively build an industrial cluster in the

Yangtze River Delta region facing the world, and promote the realization of the goal of domestic Anhui digital village construction.

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