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The State of Agricultural Development and Industrial Prosperity Pathway and Strategy Design in the Context of Data-Driven and Rural Revitalization

Abstract: - Current advances in materials science are providing a huge variety of novel adsorbents that could be used for the transformation and storage of low-temperature heat, such as the heat generated by renewable energy sources. Achieving industrial prosperity is a key step in building an all-round well-off society and realizing agricultural modernization. In the process of industrial prosperity, there are also many problems: firstly, the long-term traditional farming in China has led to the information blockage and ideological constraint of most farmers in China, so that they are slow to accept new things and new ideas; secondly, due to the "one long and one short" characteristic of long growth cycle and short storage cycle of agricultural products, it is difficult for rural transportation and deep processing of agricultural products. Secondly, because of the "long and short" nature of the long growth cycle and short storage cycle of agricultural products, the demand for rural transportation and deep processing of agricultural products is high. This study is based on the problems related to sustainable agricultural development in traditional agricultural areas. The main purpose of this study is to clarify the sustainable development status of agricultural systems under different agricultural development paths in traditional agricultural areas, to establish a methodological system for studying regional agricultural development paths, to explore the optimal path for sustainable regional agricultural development, and orderly management of sustainable agricultural development in traditional agricultural areas, so as to promote the sustainable development of traditional agricultural areas with economic prosperity, social stability and ecological health. The experimental results prove that the optimized SGA algorithm has carried out good system dynamics modeling for the typical traditional agricultural area - the problem of choosing the agricultural development path, and the comprehensive evaluation of the simulation results.

Keywords: agricultural development; industrial prosperity; rural revitalization; SGA algorithm optimization

I. INTRODUCTION

Today's society is rapidly moving into the information era, and the application of emerging technologies such as big data and governance structure [1]. In the future, use big data technology to help China's agricultural and rural development [2]. In recent years, big data has played an active role in helping China to complete the task of poverty eradication, and the perfect system established by using big data technology has broken the data barriers of various departments in poverty alleviation work and promoted the transformation of governance mode from isolation to coordination [3]. The quantitative analysis function of big data is used to discover the current situation and problems of rural poverty governance governance for quantitative assessment, and to analyze the correlation and causal relationship between rural poverty governance problems and rural resources and agricultural factors [4]. The achievement of agricultural and rural development goals requires inputs of production factors including land, human, capital, and technology [5]. The financial industry and economic development complement each other, and this is also true [6]. The modernization of agriculture and rural areas cannot move forward without the strong support of rural finance. The development of the national economy has driven the soundness of the financial service system, the service capacity has been significantly improved, and the financial industry has developed rapidly in rural areas. Statistics show that the balance of agriculture-related loans in China's financial sector has increased 6.35 times from 2007 to the end of 2020. China's rural financial institutions have played a positive role [7]. The problems of inadequate and inefficient rural financial supply are still quite prominent, and the problems of difficult and expensive loans have not yet been fundamentally solved, which seriously hinder the priority of financial capital to serve the agricultural and rural areas.

The agricultural industry is the basic guarantee industry for all other industries, and the modernization of China [8]. The development of rural economy can not only guarantee the economic income of farmers, but also promote the

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modernization of our countryside at the social level. Thus, it can promote the modernization of our country as a whole, and in turn promote our country's advancement to a medium developed country[9]. We should insist on the six areas of promotion, precise poverty alleviation, stable food and income increase, farming, rural economic development, agricultural structure adjustment and rural social governance [10]. Making agriculture strong, making the countryside beautiful and making farmers rich is a sign of achieving a strong agricultural country and is the most fundamental requirement. With the continuous promotion of urbanization in China, in following the socialist market economy, rural development factors such as talents and capital needed for rural development implement the policy of free movement between urban and rural areas, the city continues to develop while rural development stagnates or even faces the plight of regression, there is no urban development will drive rural development as proposed by some experts and scholars; instead, the advantages of urban education and medical care instead put rural The few elements of rural development, such as talents and capital, are sucked into the cities, and there is a large loss of rural talents and capital, resulting in the development of the countryside becoming more and more backward and dilapidated, and the rural areas are facing many problems, such as the old and weak main body, the deterioration of the ecological environment, the hollowing out of the countryside, and the weakness of the rural industrial base.

Under the great opportunity of the Party and State to vigorously advocate and develop the strategy of ecological civilization, the development of traditional agriculture in China has ushered in a new vitality [11]. Most of these ecological problems are related to the non-intensive, unscientific, decentralized and small-scale nature of traditional agricultural development. Further, whether we can deal with the problem of rural decline is also a matter of whether we can successfully realize the modernization construction. From a global perspective, the decline of the countryside is a common problem in modernization and urbanization, not an individual problem in urbanization in China. Many countries in the world have experienced the problems of lagging agricultural development, gathering of rural resources in the cities, and increasing rural decay during the modernization process. Countries in Europe, the United States, Japan and South Korea have actively explored and taken corresponding measures to promote rural development in response to their own conditions. The infrastructure program in the United States, rural tourism in France, the village creation movement in Japan and the new village movement in South Korea have successfully stimulated rural vitality [12]. In contrast, some countries in Latin America have failed to deal with rural development during the urbanization process, leaving the whole country in a development dilemma [13].

In summary, China, as a large developing country in the midst of rapid urbanization and modernization, needs to pay urgent attention to the global problem of rural decline. Analyzing the state of China's agricultural development and studying the ways of industrial prosperity are the top priorities of China's agricultural development at present.

II. RELATED WORKS

The study of literature [14] mentioned that with the current decay and withering of China's rural areas, the proposal of rural revitalization has received high attention at both theoretical and practical levels. Profoundly grasp its intrinsic nature, construct a theoretical analysis framework, explore the realization path, and build an evaluation system. Secondly, it provides a systematic theoretical analysis framework for rural revitalization research and further enriches the existing rural revitalization research. The literature [15] explored the key elements of rural revitalization, but these studies studied a certain element or the main material elements of people, land and money that affect rural revitalization in a more fragmented way, with a single perspective and lack of systematic consideration.

At present, most of the social studies on industrial revitalization focus on the scope of this region, and many macro issues have not yet been guided by theories, making it difficult to bring guidance to the overall rural industrial revitalization in China. This paper focuses on the priority development of rural industries through the statistics, collation and analysis of a large amount of literature data. Some innovative ideas and solutions to specific problems are developed. The literature [16] proposes to establish short-term training and rights protection institutions for migrant workers, standardize the management of grassroots enterprises, professionalize farmers, and realize the integration of industry, academia and research, etc. It is an in-depth extension and development of the theory of rural revitalization strategy, and forms a set of theoretical results of promoting rural revitalization with industrial prosperity. The literature [17] argues that insurance as a tool to support agriculture for agricultural development,

the origin of agricultural insurance is the insurance tool to transfer agricultural risks, stabilize farmers' income, promote rural stability, and improve farmers' timely recovery of production capacity in the face of disasters, and there are relatively few studies on insurance support for rural industrial revitalization, and the foreign literature review from agricultural insurance support for rural development and insurance service for agricultural industrialization The foreign literature review discusses both aspects of agricultural insurance to support rural development and insurance services for agricultural industrialization [18].

The literature [19] suggests that foreign research on the theory and practice of circular agriculture is relatively advanced, and many more mature models of circular economy development have been formed. The more typical ones are the precision agriculture model in the United States, the green energy agriculture model in Germany, the low-carbon circular agriculture model in Japan, the water-saving agriculture model in Israel, the permanent agriculture model in the United Kingdom, and the ecological agriculture model in the Philippines. According to literature [20], the development of recycling agriculture in foreign countries is not only advanced in theory and practice, but also carries out a lot of theoretical and practical research on the guarantee system of recycling agriculture in order to guarantee the effective development of recycling agriculture. At present, countries mainly from the legislative side of recycling agriculture to ensure the construction of the system. Germany was once a country suffering from pesticide and chemical fertilizer pollution, but it was also the first country to legislate to support circular agriculture. According to the literature [21-22], German legislation on circular agriculture basically covers all aspects of agricultural production, whether it is the agricultural production environment, farming system, environmental protection and ecological diversity, etc., which are all reflected in the German legislation on circular agriculture.

Industrial prosperity can promote equal development in all aspects of adjacent cities, sharing of urban-rural space, sharing of educational resources and complementary urban-rural habitat, and humanistic exchanges, unify urban-rural systems in various fields, and provide a diversified and effective practical path for the integrated development [23]. The literature [24] argues that the allocation and effectiveness of production factors have a direct impact on labor productivity. Industrial prosperity implies a high degree of agricultural modernization, scientific and efficient industrial structure, high overall quality of labor and high quality development of the economy, which are all manifestations of labor productivity improvement [25]. Thus, industrial prosperity is a direct driving force to improve local labor productivity, improve the urban-rural income gap and solve the problem of unbalanced urban-rural development.

To sum up, during the critical period of the implementation of rural revitalization strategy, we should also take the current state of China's agricultural development as the starting point, analyze the advantages of agricultural industrialization, further clarify the focus of agricultural industrialization, and promote the close cooperation of the three elements of people, industry and land to achieve the goal of flourishing agricultural industry.

III. SGA ALGORITHM OPTIMIZATION

The number of generations of termination evolution of the genetic algorithm, crossover probability, and variation probability. These four parameters have an impact on the genetic algorithm solution and solution effect, but there is no theoretical basis for their reasonable selection. In the actual operation, it often requires several trial calculations to determine the reasonable values and ranges of the parameters.

In this context, the genetic algorithm can be expressed as follows.

$$SGA = \left(C, E, P_0, M, \Phi, \Gamma, \Psi, T \right) \text{(1)}$$

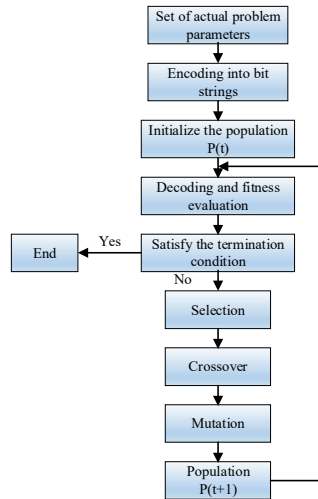The flow of the related algorithm is shown in Figure 1.

Figure 1 Flow chart of genetic algorithm

The design of encoding in practical application problems must consider the encoding method, crossover operation method, variation operation method and decoding method in a unified way.

If the objective function is the maximum problem：

$$Fit(f(x)) = \begin{cases} f(x) - c_{min}, f(x) > c_{min} \\ 0, \ others \end{cases} \quad (2)$$

The principle of this model construction is to realize the multi-level transformation of energy and the recycling of resources in the process of agricultural planting and breeding through scientific design, scale design and sufficient theory as the basis, and to achieve the recycling and efficient use of waste, through the harmless treatment of the original waste resources. The cyclic agriculture model diagram of the system is shown in Figure 2.
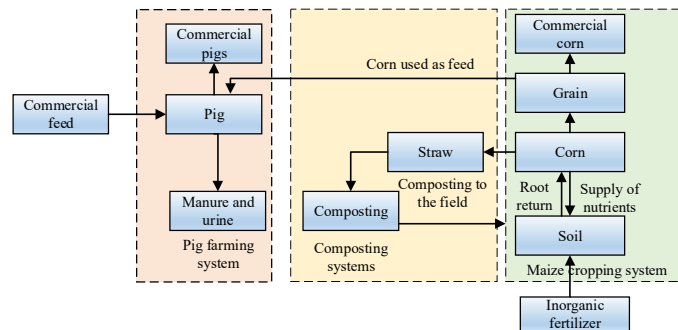

Figure 2 Ideal model of circular farming

In this ideal model, we take the nitrogen balance as the constraint in this experiment, so that the nitrogen produced by pig manure can be fully absorbed and used by maize in the whole circular agriculture model. As for the loss in the process of N circulation, we consider that it is mainly based on two parts: compost loss and soil erosion. At the same time, we consider the problems involved in the rationalization of soil structure and the balance of piglet nutrition in the planting and breeding process, which require some additional organic matter and nutrients, so it can be supplemented by applying inorganic fertilizer and adding commercial feed, so as to achieve the dynamic balance of nitrogen in the whole model. The schematic diagram of nitrogen balance is shown in Figure 3.
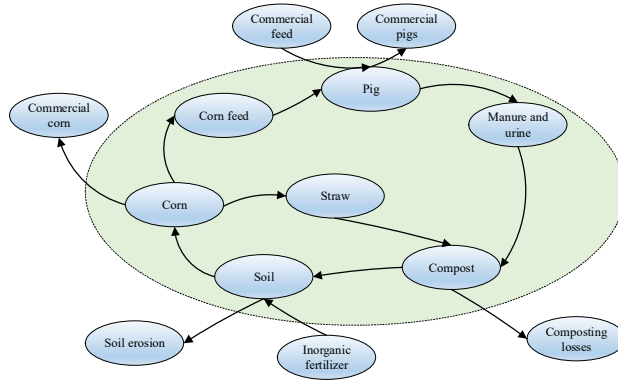
Figure 3 Schematic diagram of the nitrogen balance boundary conditions in the circular agriculture model

First we initialize the particles, whose fitness can be obtained optimally on the program according to the objective function, whose multi-objective function can be expressed as:

$$f(x) = \left[f_1(x), f_2(x), \ldots, fn(x) \right]$$
$$\text{s.t.} \quad g_j(x) \le 0, j = 1, 2, 3, \ldots, l \quad (3)$$
$$h_i(x) = 0, i = 1, 2, 3, \ldots, m$$

$$v_{i+1} = w \times v_i + c_1 \times \text{rand} \times \left(p\_best_i - x_i \right) + c_2 \times \text{rand} \times \left(g\ best_i - x_i \right) \quad (4)$$

In order to ensure the rationalization of cultivation in this model and its dynamic balance of nitrogen, we use the flow of nitrogen between the system and the external boundary as a nitrogen constraint in this model with the following constraint.

$$N\left(S_{\text{output}} \right) \le N\left(S_{\text{import}} \right) \quad (5)$$

$$\left(k_1 \cdot n_{1,1} + k_2 \cdot n_{1,2} \cdot l_2 + l_1 \right) \cdot X_1 + \left(l_2 - 1 \right) \cdot n_{2,2} \cdot X_2 \le n_3 \cdot X_3 N \quad (6)$$

Finding the objective solution that meets the maximum economic efficiency is the optimal objective we want to arrive at. And the economic efficiency is the money gained from selling the product minus the cost we need to invest in the whole model. At this point the fitness function in this multi-objective optimization problem is

$$fitness\left(x_n \right) = f(x) \quad (7)$$

The specific formula is as follows:

$$f(x) = f(a) - f(b) + f(c) \quad (8)$$

$$f(a) = m_{1,4} \cdot \left(m_{2,2} \cdot X_1 - m_{1,3} \cdot X_2 \right) + m_{2,5} \cdot K_2 \cdot X_2 \quad (9)$$

$$f(c) = m_{1,3} \cdot X_1 + m_{2,6} \cdot X_2 \quad (10)$$

The principle of weight adjustment is that the error is continuously decreasing, so that the amount of weight adjustment should be proportional to the negative gradient of the error:

$$\begin{cases} \Delta w_{jk} = -\eta \dfrac{\partial E}{\partial w_{jk}} & j = 1, 2, \cdots, m; k = 1, 2, \cdots, l \\[3mm] \Delta v_{ij} = -\eta \dfrac{\partial E}{\partial v_{ij}} & i = 1, 2, \cdots, n; j = 1, 2, \cdots, m \end{cases} \tag{11}$$

For the output and hidden layers, the formula can be written as:

$$\begin{cases} \Delta w_{jk} = -\eta \dfrac{\partial E}{\partial w_{jk}} = -\eta \dfrac{\partial E}{\partial \text{ net }_k} \dfrac{\partial net_k}{\partial w_{jk}} \\[3mm] \Delta v_{ij} = -\eta \dfrac{\partial E}{\partial v_{ij}} = -\eta \dfrac{\partial E}{\partial \text{ net }_j} \dfrac{\partial net_j}{\partial v_{ij}} \end{cases} \tag{12}$$

Multilayer feedforward networks using the SGA algorithm are by far the most widely used neural networks, and among them, single-hidden layer networks (as Figure 4) are the most commonly used. Theoretically, it has been shown that a three-layer network can approximate any continuous function with arbitrary accuracy when the number of hidden-layer units can be chosen.
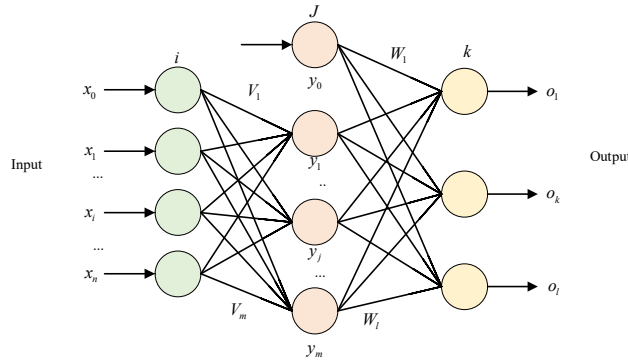

Figure 4 Schematic diagram of the three-layer SGA network structure

Due to the wide application of genetic algorithms, many different coding methods have been proposed so far, which can be summarized into three categories: binary coding methods, real number coding methods, and symbolic coding methods.

IV. METHODS

The use of big data technology is a landmark product of the information age. At present, big data technology is widely used in all levels of social governance. Big data is of great significance to change the traditional governance mode of the government. Big data thinking is conducive to promoting the rational allocation of public resources, making scientific decisions, adopting a more refined administrative management mode and providing more humane public services, which represents an innovative governance thinking and governance mode. This experiment uses particle swarm algorithm to achieve the optimal economic benefits and resource optimization of circular agriculture, regarding the step-by-step process of particle swarm algorithm, as shown in Figure 5.
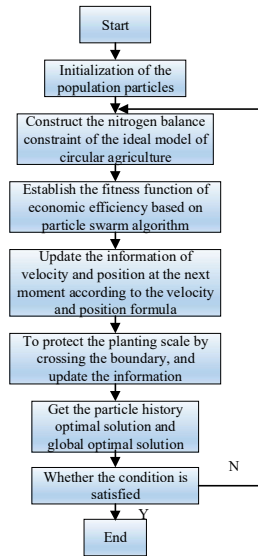
Figure 5 Flow chart of optimized PSO algorithm

Agriculture is the cornerstone and lifeline of China's national economic development, and the "three rural issues" have always been the top priority of the Party and the government in China. In the new era, the Party Central Committee puts the development of agricultural and rural modernization. Figure 6 shows the flow chart of the improved particle swarm algorithm proposed in this chapter.
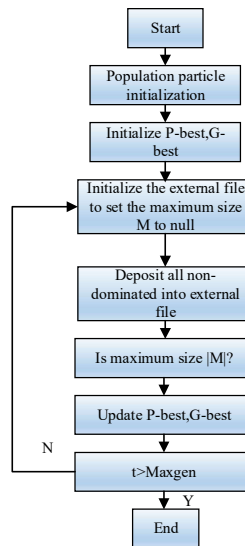

Figure 6 Flow chart of the improved multi-objective particle swarm optimization algorithm

For this quantitative evaluation of the agricultural production program, the hierarchical structure of the quantitative evaluation study of agricultural production is constructed according to the analysis process of hierarchical analysis, as shown in Figure 7.
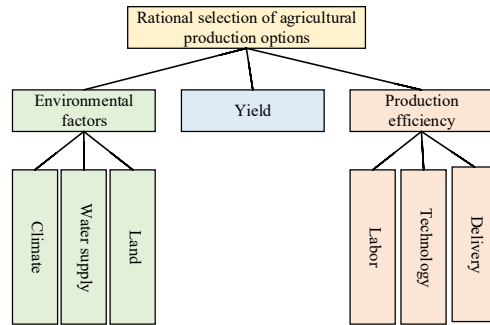
Figure 7 Hierarchical structure of quantitative evaluation of agricultural production programs

Agricultural development takes the realization of agricultural modernization, farmers' income increase and rural economic growth as its goal and starting point, and its ultimate goal is to realize rural revitalization. A large number of scholars have shown that there is a mutually reinforcing relationship between finance and agricultural development, and the level of financial development has a certain degree of influence on agriculture, while agricultural development has a counter-effect on financial development, and the two promote and influence each other. The gross regional product of the past years is shown in Figure 8, and the composition of gross regional product in 2006 is shown in Figure 9.
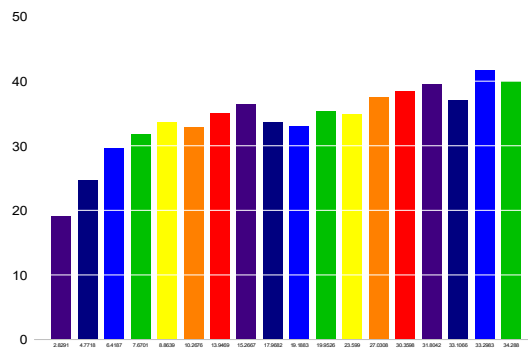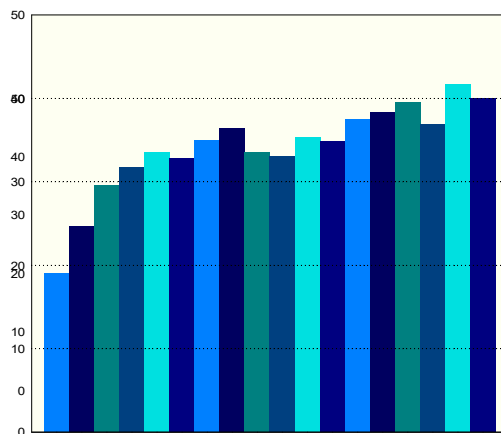

Figure 8 Gross Regional Product by Year

Figure 9 Composition of Yangzhou's GDP in 2006

V. CASE STUDY

The new rural collective economy aggregates these scattered lands through the form of farmers' land shareholding. At the same time, along with the concentration of land production materials, farmers often choose to invest the agricultural equipment they have in their hands that is invested in the land into the cooperative. In addition, some farmers will also put their idle capital in their hands into shares. Thus, the new rural collective economy has realized the aggregation of scattered resources as well as different kinds of elements within the village. The statistics of water consumption in 2006 are shown in Table 1, and the structure of water consumption is shown in Figure 10. The water consumption of agricultural irrigation in the last 4 years and the total water consumption are shown in Figure 11.

Table 1 Water consumption statistics in Yangzhou in 2006

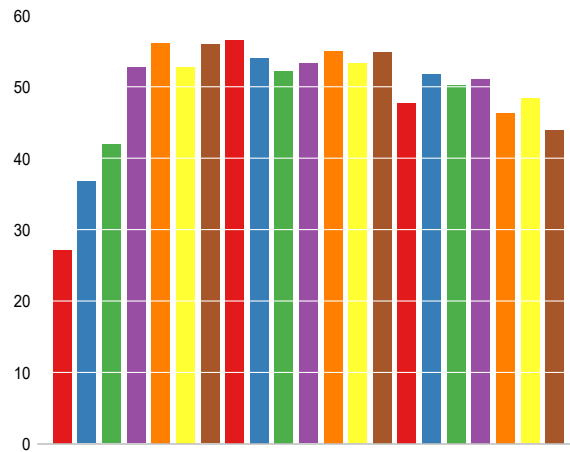|	Agricultural irrigation	Forestry, Animal Husbandry and Fishery	Industry	Living	Ecological Environment	Total
Water consumption (billion m3)	28.42	1.80	7.91	1.55	12.18	51.85
Share(%)	54.78	3.48	15.25	2.96	23.52	100

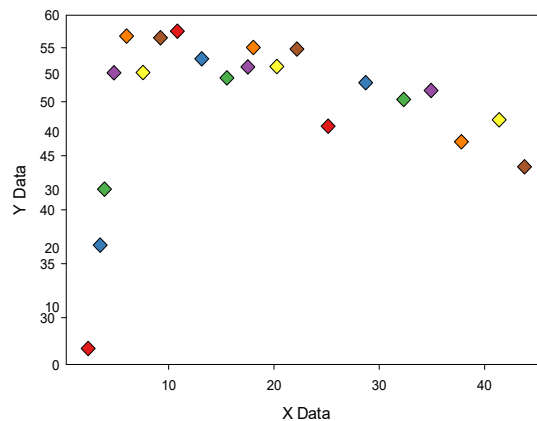Figure 10 Water use structure in Yangzhou in 2006

Figure 11 Water consumption and total water consumption of farmland irrigation in the past 4 years

In 2006, rice was the main cropping industry in Yangzhou, followed by vegetables, wheat, corn and oilseed rape, supplemented by cotton and flowers, etc. In 2006, the total cropping area of the city was 473,800 hm2, of which 75.10% was planted with grain crops, 23.13% with cotton, oil, vegetables and other cash crops, and 1.77% with fodder crops, with a ratio of 75.10:23.13:1.77 between grain, warp and feed. In 2006, the crop planting area of Yangzhou City is shown in Table 2, the planting structure layout is shown in Figure 12, and the planting area of food crops and non-food crops is shown in Figure 13.

Table 2 2006 crop planting area

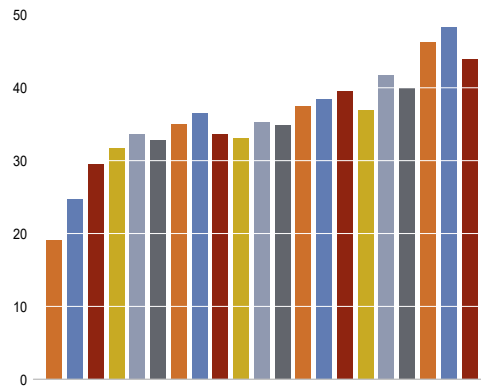| Food crops				Cash crops					Forage crops	Total
Rice	Wheat	Corn	Other	Soybean	Cotton	Oilseeds	Vegetables	Other	Green fodder	
20.89	13.3	0.17	1.22	1.22	0.52	4.77	4.28	0.17	0.84	47.38

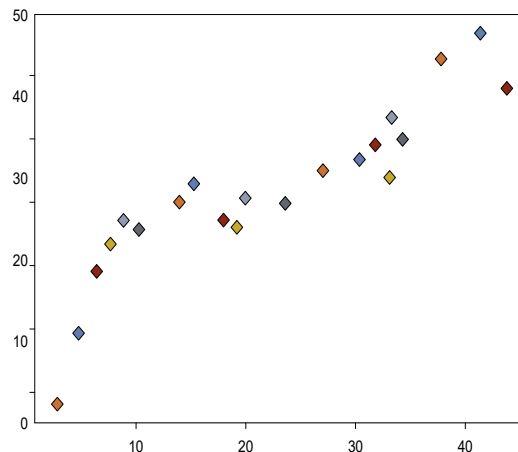Figure 12 Crop planting layout in Yangzhou City, 2006

Figure 13 Grain crops and non-food crops cultivation area

The new rural collective economy provides a platform for capable rural people and those who are willing to return to their villages to show their ambitions and attract resources that have left the countryside to return to their villages. The capable elites use the new rural collective economy to lead farmers to develop new industries and innovative

agricultural development models, transforming the skills they have learned and the insights they have gained into practice to lead rural development, so that farmers can see the bright future prospects of rural development and attract more outstanding young laborers to return to their villages for construction. Therefore, the new rural collective economy can attract the lost elements to return and realize the effective aggregation of elements in the countryside itself.

The output value of agriculture, forestry, animal husbandry and fishery is shown in Table 3, and the composition of total agricultural output value is shown in Figure 14.

Table 3 Output value of agriculture, forestry, animal husbandry and fishery in 2019

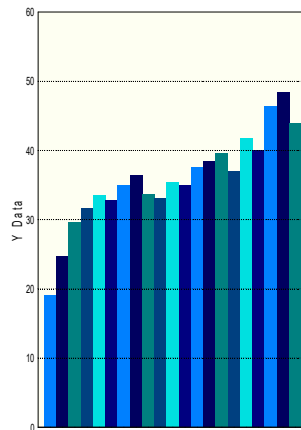| Agriculture	Forestry	Pastoralism	Fishery	Agriculture	Forestry
80.44	5.30	37.14	51.76	7.99	182.63

Figure 14 Composition of total agricultural output value in 2006

Through the analysis of rural industries, we discuss industrial prosperity from various perspectives, such as industrial modernization, professional farmers and agricultural informatization, which is also a kind of implementation and development of China's "economic construction as the center" and aims to solve the problems of rural industries. At present, most of the studies on industrial prosperity in society focus on the local area, and many macro issues have not been guided by theories, so it is difficult to bring guidance to the prosperity of rural industries in China as a whole, such as establishing short-term training and rights protection institutions for migrant workers, standardizing the management of grassroots enterprises, professionalizing farmers, and realizing the integration of industry, academia and research. It is an in-depth extension and development of the theory of rural revitalization strategy, forming a set of theoretical achievements to promote rural revitalization by industrial prosperity. The implementation of rural revitalization strategy needs to coordinate and coordinate various resources in rural areas, including land, equipment, labor force, etc. Uniform planning and management, instead of being carried out unilaterally, requires comprehensive and diversified cooperation. The task of rural revitalization is significant, and it is necessary to attach importance to development but not to achieve it overnight. To realize rural revitalization, then industrial prosperity is the basic premise, and industrial prosperity can provide strong material guarantee for other aspects, drive the whole with industry, and promote comprehensive and coordinated development of the countryside with industrial development. The development of industry can promote the employment of more farmers, so that more farmers have the basic livelihood guarantee, and thus can pay attention to the construction of various aspects such as spirituality, culture and ecology.

To sum up, the new rural construction strategy are quite different, they are related in some way. On the one hand, the main goal of rural revitalization strategy is to promote industrial prosperity, not just industrial development. On the other hand, the rural revitalization strategy emphasizes target-oriented and relies on industrial development to enhance comprehensive competitiveness.

Industrial prosperity is a requirement of the Party's basic line. Several conferences have emphasized that economic development should be the central task and the five major construction and development projects should be promoted in a coordinated manner. Since the reform and opening up, centering on economic construction has been the most crucial starting point and target direction of reform, and is a requirement of the Party's basic line. Putting industrial prosperity in the first place in the rural revitalization strategy is to put economic development at the center and carry out the Party's basic line. Figure 15 shows the statistics of crop disaster area in China from 2010 to 2019.
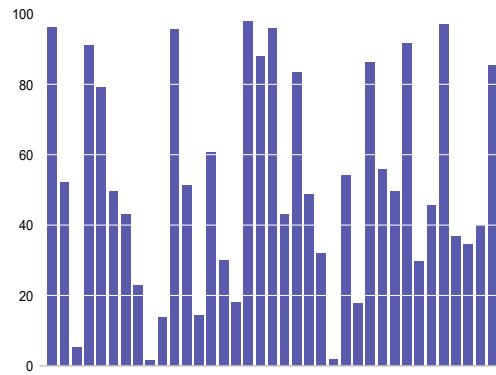

Figure 15 Area of crop damage in China from 2010 to 2019

Figure 16 shows that from 2010 to 2019, China's crop disaster area is generally decreasing trend, but every two or three years there will be a small ups and downs. 2010 to 2019, the ten-year average disaster area is about 25,000 thousand hectares, compared with the 2019 annual grain sowing area of 116,064 thousand hectares, the proportion of disaster area is as high as 21.54%, China's crop disaster The proportion is still very large, such a large proportion of the affected area seriously affects the stability of China's crop production, is the price of agricultural products fluctuate greatly, raising consumer spending and reducing consumption levels. China's direct economic losses from 2010 to 2018 natural disasters, the overall loss situation fluctuates relatively large, and every two or three years there will be a small peak in losses, and the next year or two losses have fallen back.
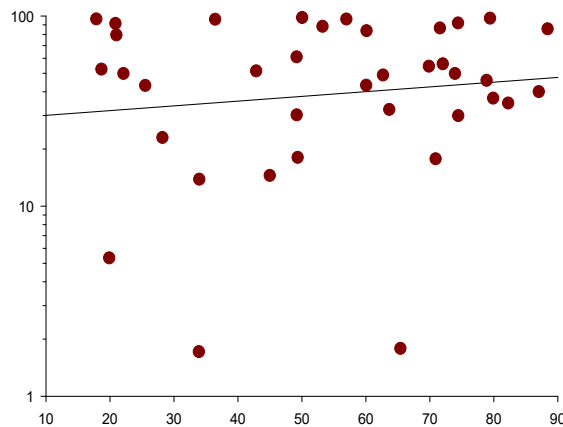

Figure 16 Direct losses from natural disasters in China, 2010-2018

The inputs of rural finance in supporting agricultural development include agricultural fixed asset investment in addition to loans for agriculture, its annual growth rate has shown extremely unstable fluctuations, with negative growth in the three years of 2010, 2017 and 2019, as shown in Figure 17.
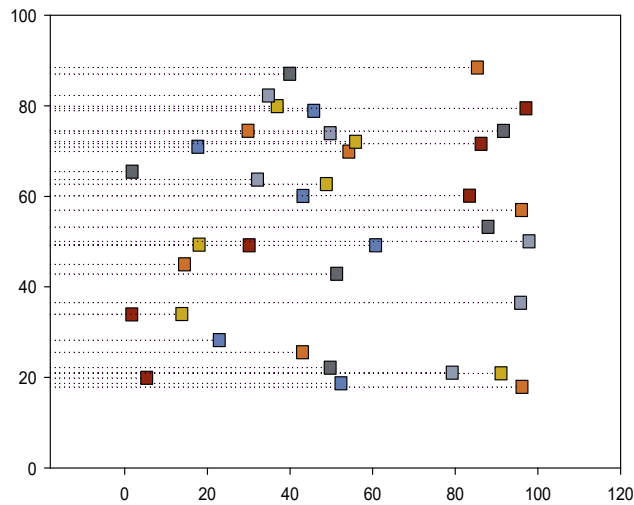
Figure 17 Change rate of investment in fixed assets in agriculture, forestry, animal husbandry and fishery from 2006 to 2019

Adopting the production method of circular agricultural economy, its inevitable to add certain circular agricultural industries to the agricultural production chain, such as mushroom planting as well as circular agricultural engineering facilities, improve the value of agricultural by-products, and make the production of the cooperative produce higher economic value, social value and ecological value, Table 4 shows the comparison table of the benefits of adopting traditional planting production and circular agricultural planting production.

Table 4 Comparison table of benefits between traditional planting production and recycling agriculture planting production

Projects	Traditional planting production	Recycling agriculture planting production
Total land area (mu)	800	800
Wheat cultivation (mu)	700	650
Total water requirement for wheat cultivation (million m3)	56	52
Total income from wheat cultivation (million yuan)	56	52
Vegetable cultivation (greenhouse)	100	100
Total water demand for vegetable planting (million m3)	500	200
Total income from vegetable cultivation (million yuan)	10	10
Scale of land for planting mushrooms (mu)	-	49.8
Total income from planting mushrooms (million yuan)	-	100
Total water demand for mushroom cultivation (million m3)	-	1
Water consumption of biogas facilities (million m3)	-	0.1
Annual depreciation of biogas facilities (million yuan)	-	2

Land area of biogas facilities(mu)	-	0.2
Annual biogas production(10,000m3)	-	100
Biogas profit volume (million yuan)	-	20
Biogas residue profit volume (million yuan)	-	2
New employment (people)	66	20
Total water demand (million m3)	556	182
Water use efficiency (yuan/m3)	0.12	553.1
Land use efficiency (million yuan/mu)	0.083	0.33
Profit per capita (million yuan)	1.46	0.23

In the above theoretical analysis of the new rural collective economy, this paper has already discussed in detail the realization form of the new rural collective economy, as well as analyzed in detail the evolution of the elements of the rural collective economy in different periods in the new element analysis, as shown in Table 5.

Table 5 Comparison of rural collective economy in different periods

Content Economic Environment Institutional base Form of realization		Traditional Rural Collective Economy	Family joint production contract responsibility system	New rural collective economy
		Planned economy	Explore the establishment of socialist market economy	Modern socialist market economy
		Rural collective ownership system	Rural collective ownership system	Rural collective ownership system
		Unified management	Family-based decentralized operation	Joint stock cooperative system
Components	Collective Resources	Mainly collective land Ownership and management rights	Collective land-based	Utilization of diversified collective resources
	Farmers	Centralized General enthusiasm Low management capacity	Decentralized Highly motivated Average management ability	Organizationalization High motivation High management capacity
	Technology	Manpower, animal power	Mechanization	Digital
	Capital	Concentrated Mainly relying on rural self accumulation and state subsidies	Dispersion Mainly relying on rural self accumulation and state subsidies	Centralized Diversified channels (state, society, financial institutions, rural)
	Factor Expansion			Natural ecology, culture and education

Compared with the traditional rural collective economy and the household joint production contract responsibility system, the new rural collective economy, which is compatible with the modern socialist market economy, has the

same institutional basis as the past rural collective economy, i.e., adhering to the rural collective ownership system, but also has certain new features, which are mainly reflected in the following aspects: from the realization form, unlike the traditional rural collective economy which adopts the unified operation of the people's commune and In terms of the form of realization, unlike the family-based decentralized operation under the traditional rural collective economy of the People's Commune and the family joint production contract responsibility system, the new rural collective economy is mainly realized in the form of joint stock cooperation system, which can not only bring into play the efficiency of factor aggregation, but also build a modern governance, where the ownership and operation rights of land are vested in the collective and the family joint production responsibility system where the ownership and contract management rights are separated, the new rural collective economy uses the "separation of three rights of land" as the basis for land shareholding cooperation and continuously reforms the property rights of other collective resources in rural areas, which can not only implement the ownership rights of collective resources but also protect the interests of individual farmers through clear rights and shareholding cooperation.

VI. CONCLUSION

 Through the in-depth study and analysis of industrial prosperity, the problems encountered in the process of industrial prosperity implementation and the effective discussion of countermeasures to solve the problems, it is concluded that in order to realize industrial prosperity and agricultural modernization. Modern information technology is the effective means, and government policy support is the basis. It is led by the joint efforts of farmers and rural enterprises. Through the realization of effective standardized management of rural industries; the unification of rural grassroots occupations; the effective integration of industry, academia and research; the optimal allocation of rural land resources, reasonable transfer and other means. In turn, the continuous breakthrough of rural economy will be realized, and the modernization of agriculture and industrial prosperity will be ultimately achieved. This discussion follows the existing theoretical guidance and consideration of rural areas from the analysis of problems to the proposal of countermeasures. Both theoretical and practical aspects are of great significance to the realization of industrial prosperity in China. The issue of prosperity of rural industries is the top priority of the "three rural areas". Industrial prosperity is also the basis and prerequisite for the realization of other tasks in rural areas. The article puts forward a series of targeted solutions and development directions for industrial prosperity through the research and discussion of various aspects of industrial prosperity. Of course, there are still some shortcomings in the research and analysis, and the special situation is not well considered, for example, due to insufficient mastery of economics, management and other professional knowledge; lack of complete agricultural information research, etc. In short, the realization of industrial prosperity is a permanent topic, and new problems are bound to appear with the development of time, which requires us to keep up with the times and always keep studying and researching.

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