

# Research on the Development Guarantee of the Diversified Supply of Agricultural Energy in Changchun City Based on the Rural Revitalization Strategy

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**ABSTRACT.** *China is one of the largest agricultural countries in the world. Jilin Province, located in the middle of Northeast China, is one of the major agricultural provinces. Agricultural products drive the growth of agricultural economy, but also consume energy. Up to now, the energy constraint of agriculture is not a "flow constraint" state, but a "inventory constraint" state. Therefore, taking Changchun City as an example, under the background of implementing the Rural Revitalization Strategy, adhering to the overall planning of urban and rural development and the driving role of central cities, we should continue to expand the investment in modern agriculture and improve the industrialization of rural agriculture. In addition, under the policy support system, the construction of the three modern agricultural systems should be improved rapidly. Based on the analysis of the strategy of diversified energy supply, this paper puts forward some suggestions on agricultural modernization, which can promote the conservation of agricultural resources and the development of new agriculture.*

**KEYWORDS:** *Agricultural Energy, Rural Revitalization Strategy, Development Guarantee*

## 1. Introduction

In recent years, Changchun City has continuously strengthened the transformation and upgrading of agriculture, optimized the agricultural industrial structure, continuously strengthened the construction of agricultural infrastructure and improved the comprehensive agricultural production capacity. We should pay attention to the green creation of agriculture and constantly improve the level of agricultural green development; expand investment in agriculture to promote the integrated development of three rural industries; carry out comprehensive reform in rural areas, so as to improve the new momentum of agricultural and rural development. Strengthen the guidance of rural industry revitalization planning, realize the revitalization of rural industry in Changchun, promote the integration and development of rural industry, reform the way of agricultural investment and

financing and talent attraction policy, and promote the construction of rural industry revitalization.

## **2. Current Situation of Agricultural Development in Changchun**

Under the background of Rural Revitalization Strategy, Changchun has always insisted on learning the spirit of general secretary Xi Jinping's important speech on three rural areas and agricultural revitalization, and implemented it in accordance with the deployment requirements of the Labor Conference of central and Jilin provinces and municipalities, focusing on promoting the structural reform of the agricultural supply side. Taking the construction of "three systems" of modern agriculture as the starting point, this main line highlights the six key tasks of "adjusting structure, promoting transformation, projection, brand building, reform and increasing income". Recently, some results have been achieved in the adjustment of agricultural structure. The rapid development of animal husbandry, horticulture and greenhouse film economy in rural areas has become an important industry to improve farmers' income. At the same time, the rapid development of rural tourism, leisure agriculture and rural e-commerce has promoted the rapid integration of the three industries. The steady development of agriculture and rural economy and the improvement of technology have laid a solid foundation for the revitalization of rural industry in Changchun.

## **3. Cause Analysis of Agricultural Energy Problems in Changchun City**

### ***3.1. The Development Stage of Rural Industry***

The opinions of the CPC Central Committee and the State Council on the implementation of the Rural Revitalization Strategy pointed out that the issue of agriculture and rural farmers is the fundamental issue of the national economy and people's livelihood, and is the top priority of the party's work., describes the grand goal of solving and developing the "three-step" problems in the new period, and puts forward the "three-step" timetable of the rural industrial development stage. First of all, the first stage is to 2020, The basic formation of the rural institutional framework and policy system is one of the important progress made in Rural Revitalization; In the second stage, by 2035, decisive progress has been made in rural revitalization, and agriculture and rural modernization have been basically completed; in the third stage, by 2050, the rural areas will be fully revived and developed, and agriculture, rural beauty and farmers' wealth will be fully restored and realized.

### ***3.2. Analysis of Energy Problems and Causes in Agricultural Development***

Agriculture and rural areas constitute a complete natural ecosystem. Respect the natural ecosystem, scientifically and rationally use energy for production in agriculture, so as to obtain stable agricultural products. On the basis of agricultural

products supply, we implement green agriculture to protect and improve the ecological environment. Some provinces have done well, such as Qingtian rice fish symbiosis system in Zhejiang Province, rice fish duck complex system in Guizhou Province in Jiangyan Township, and Hani rice terraced field system in Honghe County of Yunnan Province. In some places, it is even based on the development that destroys the ecological environment. The root of the problem is analyzed in depth, and several causes are obtained. First of all, the lag of agricultural planning guidance. As rural revitalization is a long-term and arduous strategic task, planning and planning must be carried out in the implementation, which is the premise of implementation.

In the strategy of rural revitalization, three stages of rural development are put forward. The first is to form an institutional framework and reform system by 2020. Now, Jilin Province is stepping up to customize the plan of Rural Revitalization Strategy, enhance precision design, and avoid detours. In recent years, Changchun municipal government has formulated a series of action plans, which are all aimed at the overall strategic height. However, we can also realize that there are still some problems in the development of rural industry. First, although there are many professional plans, there is a lack of overall plans. Up to now, the systematic, scientific and comprehensive strategic plan is not perfect enough; secondly, there is some disjointed phenomenon between the city and county planning, and the organic integration needs to be improved; thirdly, the planning is still not detailed, the leading role is weak, and some plans are unified and huge. However, it is necessary to further improve the township, village groups, industries, projects and measures. Fourth, the lack of funds. The lack of investment and financing channels makes many industries lack the power of production. "The terracotta warriors and horses did not move, and the valley and grass were the first." The demand for funds is the top priority for Rural Revitalization. But, However, some places or enterprises are facing difficulties in financing and loans. For example, some rural enterprises apply for loans from financial institutions, and their borrowing time will not exceed one year; while some industrial projects cannot raise funds, which leads to the inability to expand production scale and accept some large orders. In short, the government should strengthen the proportion of investment in rural industries, appropriately reduce the threshold of rural industry financing and loans, and simplify the complex procedures of financing and loans. There is no doubt that "financial difficulties" is one of the important obstacles to rural revitalization. The main reason why the financial spring cannot flow to rural areas is that the financial services in rural areas have high risks and high costs, so there is a lack of a perfect credit system in rural areas. The fifth is the serious shortage of human resources. There is also an important reason for the bottleneck of rural revitalization, which is the serious lack of rural human resources. According to the survey, in recent years, with the rapid development of urbanization, the number of high-quality rural labor force and talents in Changchun area is decreasing year by year. With the emergence of aging problem, the quality of left behind children and agricultural production personnel still need to be further improved. In the new agricultural management subject, there is still a lack of rural technical and management personnel.

Rural producers are divided into different types, they form from different ways of human capital investment and have different professional skills structure. With the new generation of migrant workers from the survival needs to the development needs, in order to improve the living conditions and obtain a higher quality of life, the demand for skills training is increasing. However, due to the imbalance of the funding structure of the new generation of migrant workers' vocational training, their training expenditure mainly comes from their own expenses, mainly from family subsidies, and the proportion of subsidies from enterprises and the government is low.

#### **4. Objective and Strategy of Diversified Supply of Agricultural Energy is Analyzed.**

Through the previous description, Using Internet and other modern information technology to integrate and share agricultural resources, so that agricultural resources can be reasonably optimized and utilized to meet the needs of modern agricultural economic activities. It is a long-term process to promote the structural reform of agricultural supply side. To deal with the relationship between the government and the market and to coordinate the interests of all parties, it is facing many major tests. It is a very comprehensive concept. Therefore, we try to establish an index system to evaluate the agricultural energy supply capacity comprehensively. Through the above theoretical elaboration and analysis, the allocation of agricultural elements is the embodiment of the diversified supply capacity of agricultural industry energy. The "six elements" under the "three systems" are the core elements related to agricultural production. The "three systems" is namely, the main body, Products, funds, information, technology and systems, the "six capabilities" corresponding to these six elements, namely, "supply body formation ability", "high-quality product production capacity", "financial communication capacity", "agricultural information application capability" ", technology research and development capabilities" and "institutional support capabilities."

##### ***4.1 Establishment of Economical Agricultural Industrial Structure***

From the perspective of macro and long-term development of the government, one of the biggest energy-saving measures is the adjustment of industrial structure. It is a long-term strategic task to build a conservation oriented agricultural mechanization. We should give preferential and support to agricultural mechanization in finance, credit and taxation. We should pay attention to the adjustment of the internal structure of agricultural machinery industry, formulate standards for eliminating old products, enforce the scrapping period, and accelerate the industrialization process, which is also our inevitable choice.

First, according to the current situation and trend of agricultural economic development in Changchun, there are still obstacles for the leap of agricultural development stage with high energy consumption. Therefore, according to China's energy restrictions and other conditions. Due to the high price and serious pollution

in some important areas, it is necessary to establish a new concept of industrial structure adjustment, promote the development of agriculture by using information technology, and upgrade the traditional agricultural industry must combine the use of high-tech and advanced applicable technology. Agricultural informatization, driving the optimization of agricultural industrial structure, is conducive to the growth of agricultural economy, energy efficiency and output efficiency are also increased.

Second, we need to improve technological progress. In the whole agricultural industrial structure adjustment, we need to rely on scientific and technological innovation and progress to promote the upgrading of industrial structure, promote the improvement of energy utilization efficiency. The main way to reduce energy consumption is to develop energy-saving products and promote the application of energy-saving technology. Alternative resources and energy can also be developed to reduce the pressure on existing energy sources. Both can affect energy consumption. The adjustment and optimization of agricultural structure should fully rely on the progress of science and technology. We should grasp the two key points of transforming traditional products and developing new products, and promote the adjustment and optimization of agricultural structure through the application of high-tech and the improvement of the quality of workers. The acceleration of technological upgrading can maximally eliminate outdated technology and equipment, make use of advanced technical equipment and instruments as much as possible. Third, We should adjust and optimize the agricultural structure according to the market demand and its changing trend, so as to meet the social demand for the diversification and quality of agricultural products. According to the market demand, we should reduce the low-level simple and repetitive construction, especially the avoidance of the use of price leverage, so as to promote the efficient use of energy and make artificial changes. Due to the low price of energy, it leads to serious waste and low efficiency. By adjusting and optimizing the agricultural structure, giving full play to the regional comparative advantages, tapping the potential of resource utilization, realizing the rational allocation of resources and improving the breadth and depth of resource development and utilization, we can achieve the combination of effective utilization of resources and reasonable protection, and promote the sustainable development of agriculture. It must strengthen the quality, variety and efficiency, so as to better save energy and reduce consumption and achieve the role of environmental protection.

#### ***4.2. Agricultural "Flow Restriction"***

To expand the protection level of energy demand brought about by the adjustment of agricultural industrial structure, it is necessary to reduce the current "flow restriction" of energy supply, so as to promote the coordinated development of the two, and various measures should be taken to support it.

First is the adjustment of energy consumption structure, the development of new energy, the search for alternative energy, the development of renewable energy and the cleaning of energy, so as to realize the diversification, diversification and

cleaning of energy supply. In recent years, the sharp increase of oil consumption leads to the continuous rise of oil price. However, the sharp increase of oil consumption cannot directly lead to the rapid economic growth. Therefore, New energy can be developed in rural areas, such as solar energy, biogas, thermal energy and wind energy, which can be developed in rural areas., instead of using oil alone, to promote the development of new agricultural industry with energy conservation and environmental protection.

Secondly, we can use economic means to limit the export of high pollution agricultural products and processed agricultural products, adjust the rationality of industrial structure, and limit unreasonable energy consumption products, especially high pollution agricultural products. Reduce the production and export of agricultural products with high energy consumption, serious pollution and comparative value-added, and reduce the "flow constraint" of energy.

## 5. Conclusion

Nowadays, Changchun municipal government is seriously studying and planning the direction of agricultural development. In the context of Rural Revitalization and development strategy, we should strengthen the development of agriculture, increase the income level of farmers, and promote the construction of local economic development. In the face of opportunities and challenges, Changchun has been carrying out the "three rural" work, strengthening the structural reform of agricultural supply side, adjusting the agricultural industrial structure, transfer mode, product brand and management mode, promoting the increase of farmers' income, promoting the construction of modern agriculture with reform as the driving force, and striving to embark on the new agricultural development path of energy saving and resource saving.

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