

# Research on Rural Infrastructure Financing in China

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## Abstract

**The report of the 19th National Congress of the Communist Party of China puts forward the strategy of rural revitalization, which points out the direction for the further development of China's rural areas. Rural infrastructure is a short board for rural revitalization. It cannot meet the needs of the majority of rural residents, and there is still an imbalance between supply and demand of funds. In the context of rural rejuvenation, combined with the current situation of supply and demand of funds for rural infrastructure construction, from the aspects of finance, financial institutions, social capital, rural collective organizations, and farmers, the paper will put forward measures to improve the financing to meet the shortfall and optimize the use of funds for rural infrastructure construction.**

## Keywords

**Rural infrastructure, Financing, Financial institutions, Rural revitalization.**

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## 1. Introduction

In recent years, the government has increased investment and construction of rural infrastructure, and rural production and farmers' living conditions have improved to some extent. However, the distribution density and utilization coefficient of rural infrastructure are relatively low, and there is a certain gap compared with cities. Rural infrastructure construction is still a short board for rural revitalization. Problems such as the gap between urban and rural areas, imbalance between supply and demand, and shortage of funds cannot be solved, which will affect the development of rural economy and the implementation of rural strategies. The 2017 Central Rural Working Conference put forward the need to promote the construction of rural infrastructure and make rural infrastructure construction the focus of public infrastructure construction [1]. Therefore, the government should give priority to the construction of rural infrastructure, increase fiscal investment, give play to the role of government guidance, and narrow the gap between urban and rural infrastructure. The main problem that restricts the construction of rural infrastructure is financing. Unlike the financing of general enterprise operating projects, agricultural infrastructure financing must take into account the attributes of public products and the profitability of the project itself in the financing process. Therefore, the government must not only increase the amount of capital supply, but also combine technological characteristics and system innovation of rural infrastructure products, explore its operable projects and market-based financing models, and expand financing channels for rural infrastructure construction and revitalization strategy.

## 2. Supply and Demand Status of Rural Infrastructure Funds in China

### 2.1 Status of Rural Infrastructure Fund Demand

Funding for farmland water conservancy infrastructure is strongly needed. In recent years, the effective irrigated area and water-saving irrigated area in China have increased year by year, and the investment growth rate in the reconstruction of irrigation areas has accelerated. However, the effective utilization coefficient of farmland irrigation water is still lower than the world average level. Therefore, we must insist on the development of water-saving irrigation operations in a prominent position, do a good job in supporting construction and management of water conservancy facilities, strengthen the construction of farmland water conservancy projects and precautions, speed up the water-saving transformation of irrigation districts, and develop water conservancy facilities tailored to local conditions. Areas with excellent natural conditions need to establish large-scale, comprehensive water conservancy facilities. In areas with unfavorable natural conditions, miniature water conservancy facilities can be established, and more attention is paid to its practicality. The construction and renovation of these farmland water conservancy facilities cannot be achieved without the support of funds.

The demand for funds for the construction of rural transportation facilities has increased. At present, although China has basically formed a convenient and accessible rural road network, the number and quality of roads are still far from the requirements of modern agriculture. The lag in the construction of transportation facilities has restricted the development of agricultural products and agricultural production logistics. Some capital investments cannot meet the rural, agricultural, and peasant funding needs for rural transportation facilities in the context of rural revitalization.

There is a huge need for funds for agricultural informatization construction. "Internet + Agriculture" and Internet sales have become important means and paths for the development of modern agriculture and the expansion of online sales channels. China's rural network infrastructure is not complete, farmers use the Internet relatively infrequently, and their operating capabilities are weak. Advanced technologies such as the agricultural Internet of Things and the Internet have not yet been fully promoted. Therefore, it is necessary to promote the informatization construction of rural areas in China, expand the coverage of rural networks, accelerate the sharing and use of information resources, and gradually form an integrated information network that connects local and foreign markets and covers production and consumption, provides governments, enterprises, and farmers with high-quality and efficient agricultural information services, reduces blindness in production, and enables farmers and enterprises to adjust production according to changes in market demand. Expanding the coverage of rural networks and strengthening the construction of agricultural informatization can not be separated from the government and financial institutions' financial support.

### 2.2 Status of Rural Infrastructure Funding

#### 2.2.1 Single supply channel for rural infrastructure funds

Rural infrastructure is the basis for agricultural development and increasing farmers' income. Due to the problems of unclear property right boundaries and market access, the enthusiasm for social capital investment is not high. If the property rights are blurred in rural infrastructure, for projects with positive externalities, there is an earnings spillover, private companies will not invest, and for projects with "non-exclusiveness", the costs of private investment in economic activities are difficult to recover through project investment. The economic effect is uncertain, and private companies for profit-making purposes will not invest on a large scale. Therefore, the participation of private enterprises is not high, and government supply is the main factor.

#### 2.2.2 The total supply of rural infrastructure funds is insufficient

In recent years, China attaches great importance to the construction of rural infrastructure. Fiscal investment has not only increased investment in rural infrastructure, but also guided the inflow of social capital, making the overall investment trend upward. Although the rural infrastructure

construction has achieved remarkable results, there is still a gap compared with urban areas, and there are contradictions of imbalanced and insufficient supply.

### 2.2.3 Inefficient use of rural infrastructure funds

In the infrastructure disbursement link, since funds come from different departments, cross-investment and duplication of construction will result. There are problems such as the appropriation, misappropriation, detention, and interception of construction funds in the use link, thereby reducing the efficiency of capital utilization. After the completion of the construction, due to the ambiguity of property rights, there will be problems of inefficient operation and management. The imperfect performance evaluation mechanism and supervision mechanism make some rural public infrastructure projects become image projects, lacking their practicality, causing waste and loss of rural public resources [2].

## 3. Countermeasures to improve China's rural infrastructure financing

### 3.1 Increase financial support and guidance

The state should tilt fiscal funds more toward the vast rural areas, increase fiscal support for the construction of rural infrastructure, and make better use of fiscal quotation marks. For different types of rural infrastructure finance, different policies should be adopted to give them different support. For rural infrastructure with a purely public product nature, government investment should be the main focus, adjusting the total fiscal expenditure and structure, increasing the proportion of rural infrastructure construction funds in fiscal expenditure and GDP, and combining the urgent needs of farmers and agriculture. The selection and construction of rural infrastructure funds should be selected; for rural infrastructure with quasi-public product nature, the government should reduce direct intervention and play a guiding role, explore technically and institutionally innovative projects, explore marketable projects, and explore marketization Financing model [3]. Project construction should be used as a link to guide the inflow of social funds by optimizing the environment for supporting agriculture, improving fiscal, tax and monetary support policies, strengthening differentiated supervision systems, improving risk sharing and compensation mechanisms, and introducing incentive policies.

### 3.2 Strengthening agricultural support by rural financial institutions

Give full play to the role of policy-based financial institutions and rural cooperative financial institutions, and increase rural agricultural support. For policy-oriented financial institutions such as the Agricultural Development Bank, it is necessary to strengthen the inclination of policy-oriented financial services to the field of rural infrastructure construction, and supplement the shortage of construction funds with the help of the input of policy-based credit funds [4]. For cooperative financial institutions such as rural commercial banks and rural credit cooperatives, they should take advantage of outlets, lower the loan threshold, expand the scope of financial services, and provide more financial support for infrastructure construction. In addition, we will further promote innovation in rural financial products and expand financing channels. Relying on relevant credit guarantee institutions to diversify financial risks and carry out pledge loans related to rural infrastructure, such as pledge of real estate income rights and pledge of project charging rights.

### 3.3 Stimulate investment in social capital

The input of social capital can alleviate the shortage of financial investment budget funds. Our government should improve the relevant laws, provide the necessary legal environment for social financing of rural infrastructure financing, protect the legitimate rights of investors, and stimulate the enthusiasm of social capital investment. At the same time, regional blockades were lifted and social capital access was widened. Drawing on the urban infrastructure financing model, we will launch rural infrastructure investment projects suitable for social capital participation, and guide social capital to effectively participate in the construction of rural infrastructure.

### 3.4 Strengthening the investment and management capacity of rural collective organizations and farmers

Rural infrastructure is the foundation of farmers' production and life and rural economic development. Therefore, the role of rural collective organizations and farmers should be brought into play. First, improve the investment and supply capacity of rural collective organizations and farmers in rural infrastructure construction. All localities should combine their own resource advantages to develop distinctive rural industries, increase their economic income, and provide funding guarantees for investment in infrastructure. Secondly, with the help of innovative fund-raising models such as the establishment of collective economic construction activity funds, the supply gap of rural infrastructure has been replenished. Finally, improve the "one matter, one discussion" system and the villager autonomy system, strengthen farmers' collective consciousness, and give play to the role of farmers in the investment and management of rural infrastructure.

## 4. Conclusion

The relative lag of rural infrastructure construction in China is a key factor that affects the development of agriculture and rural areas and restricts the implementation of rural revitalization strategies. There is a strong demand for rural infrastructure funds. Whether it is to develop water-saving irrigation operations, the construction of transportation facilities, or to expand the coverage of rural networks and strengthen the construction of agricultural informatization is inseparable from the support of rural infrastructure funds. Compared with demand, the supply of rural infrastructure funds is obviously inadequate and there is a large gap. The specific manifestations are that there is a single supply channel for rural infrastructure funds, the participation of private enterprises is not high, and government supply is the main source; the total supply of rural infrastructure funds is insufficient and there is still a gap compared with cities; at the same time, funds are allocated, used, operated inefficiently. Therefore, the shortage of funds for rural infrastructure construction projects can be resolved by increasing financial support and investment, strengthening the support of rural financial institutions for agriculture, stimulating the enthusiasm of social capital investment, and strengthening the investment and management capabilities of rural collective organizations and farmers to improve the efficiency of fund use. Due to the influence of national fiscal revenue, fiscal expenditure, economic growth and other factors, fiscal support funds for agriculture cannot increase significantly, and it is difficult for farmers to increase their own accumulation. Therefore, the focus of rural infrastructure construction should be on social capital integration and financial support. Broadening financing channels and increasing the supply of rural infrastructure is not only a strong guarantee for rural infrastructure construction, but also a solid material foundation for the rural revitalization strategy.

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