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# Addressing Investment and Financing Challenges in Facility Agriculture Development: A Case Study of Laibin City under China's Rural Revitalization Strategy

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***Abstract:*** *Located in a key position within the facility agriculture belt of the Central Guangxi Plain, Laibin City boasts favorable conditions for agricultural cultivation and significant potential for the development of facility agriculture. However, its progress is constrained by challenges such as high capital investment demands and financing difficulties in facility agriculture. Based on an analysis of the broader context and development trends, this paper focuses on two core issues—funding inputs and financing—to propose targeted countermeasures and strategies. While offering specific recommendations, it also highlights key considerations for implementation. The study aims to provide new insights for advancing facility agriculture in Laibin City while serving as a reference for other cities facing similar challenges.*

***Keywords:*** *Laibin City, Guangxi, China, Facility Agriculture, Capital Investment Challenges, Financing Difficulties, Policy Recommendations*

## 1. Introduction

Laibin City is situated in central Guangxi and has earned prestigious titles such as "China's Sugar Capital," "World Yao Capital," "Pangu Culture Capital," and "China Ornamental Stone City" [1]. As an important component of the facility agriculture zone in the Central Guangxi Basin Plain, Laibin is adjacent to two major cities - Nanning and Liuzhou. It enjoys abundant rainfall, sufficient sunlight, rich biological germplasm resources, and distinctive Yao ethnic characteristics, giving it obvious agricultural development advantages. The city has tremendous potential and room for growth in facility agriculture, making it an important potential production base for commercial grains, forest fruits, livestock, and aquatic products for Guangxi and even the Guangdong-Hong Kong-Macao Greater Bay Area. With its unique resource advantages, Laibin has great potential for developing modern facility agriculture.

By coordinating land, capital, talent and other factors, Laibin has vigorously developed facility agriculture, premium agriculture and smart agriculture. Currently, it has 100,000 mu of facility agriculture and 73 major projects. Agricultural product breeding and processing industries such as eel, Wagyu beef, Australian Hu sheep, dairy buffalo and California bass have begun to take shape [2].

The implementation of the rural revitalization strategy is of great significance to China's development and also profoundly important for Laibin's progress [3]. Developing facility agriculture in Laibin is: An important component of solidly advancing the structural reform of the agricultural supply side and accelerating the development of new quality productive forces in agriculture, An effective implementation of national and regional work deployments for modern facility agriculture construction, A crucial measure to accelerate the high-quality development of modern characteristic agriculture in Laibin and achieve the city's goal of building a 100-billion-yuan modern characteristic agriculture

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industry; An inevitable requirement to further promote rural revitalization in Laibin, consolidate poverty alleviation achievements, increase farmers' income, reduce urban-rural income gaps, and enhance people's happiness.

Currently, like developing agricultural economy, Laibin's facility agriculture development faces problems such as large capital investment demands and financing difficulties [4]. These issues are having negative impacts on the high-quality development of facility agriculture in Laibin. If not resolved, they may affect the progress of rural revitalization and facility agriculture development. Therefore, various methods and policies can be utilized to address these problems and achieve good results in solving the issues of large capital investment demands and financing difficulties. This report analyzes the causes, proposes coping strategies, provides methodological suggestions and notes precautions regarding these two major difficulties.

## 2. Analysis and Countermeasures for Large Capital Investment Demands

Capital investment is an important foundation and prerequisite for developing facility agriculture. To improve the quality and scale of facility agriculture development, continuous capital investment and financial support are needed. Currently, the difficulties in facility agriculture capital investment are mainly manifested in insufficient investment willingness of market entities and inadequate new capital investment, especially for large-scale facility agriculture projects.

The difficulties in capital investment are comprehensive results caused by multiple problems. Macroscopically, the international situation, especially the complex and volatile China-U.S. relations, the gradual deepening of deglobalization, China's economic development mode transitioning from high-speed growth to high-quality development, the important period of building a Chinese-style modernization system, significant downward economic pressure, and obvious rising trends in debt scale and deficit rate all contribute. Specifically, various market entities face low investment returns, weak investment and operation willingness, and increased investment uncertainties and risks, which affect development potential.

To address the issue of high capital investment requirements, measures can be implemented from the aspects outlined in Figure 1.

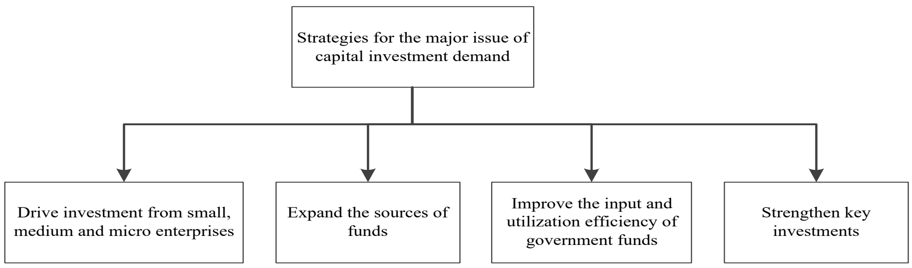


*Figure 1 Policy suggestions for large capital investment demand problems*

### *2.1 In driving investments from small and medium-sized enterprises (SMEs), the investment driving effect of large-scale enterprises can be enhanced [5]*

Among various market entities, SMEs account for the majority, but their potential investment capacity should not be ignored. Although these investors have strong market sensitivity, short feedback loops, and strong investment and development willingness, they also face problems such as weak systematic investment development strategies, insufficient understanding of world and national economic development patterns, inadequate investment capacity and accumulation, unclear investment direction, long investment observation periods, and herd mentality in investments. For these market entities with great investment potential, it is necessary to enhance the driving effect of investments from large-scale enterprises, especially state-owned enterprises. Utilizing large enterprises' advantages in deeper grasp of development strategies, more sufficient information acquisition, prominent scale effects, and stronger, more sustainable industrial and supply chains can drive medium-sized enterprise investments, which in turn can drive micro-enterprise investments, forming a multi-level demonstration effect. When enhancing the investment driving effect of large-scale enterprises, attention should be paid to giving full play to the driving and leading role of state-owned enterprises. During the driving and leading process, it is crucial to carefully select investment directions and industries, guiding other

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enterprises toward advantageous facility agriculture development directions. Great importance should be attached to enhancing trust in the driving process, creating a virtuous cycle of "trust-driven investment-operation profits-enhanced trust." The decisive role of the market in resource allocation must be highly valued.

### *2.2 In expanding funding sources, the synergistic effect between rural revitalization investments and infrastructure construction can be utilized*

Closely integrating rural revitalization with facility agriculture development is an important aspect of promoting their coordinated development. One of the connection points for promoting coordinated development is infrastructure investment for facility agriculture. To develop facility agriculture, agricultural infrastructure is indispensable. Facility agriculture infrastructure is the soil for cultivating facility agriculture development. Therefore, the fundamental role of rural revitalization and government infrastructure investment can be leveraged to consolidate the foundation for facility agriculture development. Facility agriculture infrastructure includes network infrastructure for promoting smart agriculture development, centralized seedling facilities and grain drying equipment for facility crop cultivation, and cold chain transportation facilities for facility livestock development. When constructing facility agriculture infrastructure, it is important to select projects according to local conditions and timing, focusing on urgent needs and strategic demands of the facility agriculture industry, and prioritizing potential goals and expected sectors of facility agriculture development. Emphasis should be placed on highlighting priorities and characteristics, avoiding comprehensive but unfocused investments that would exacerbate capital investment difficulties.

### *2.3 In improving the efficiency of government fund investment and utilization [6], the method of modular fund allocation can be explored*

In the process of capital investment and budget utilization, situations often occur where certain budget areas have sufficient surpluses that are "quickly" spent as the budget cycle nears its end, while other areas face budget shortages and have to "borrow" from other budgets to meet necessary expenditures. These problems arise partly because emergency events in budget areas cannot be predicted in advance during budget declaration, and partly because budgets are set too detailed. Since facility agriculture itself has the attribute requirements of investment-intensive development and inherent needs for segmented and integrated capital utilization, while ensuring fiscal discipline and other relevant principles, and within the scope of investment risk prevention and control, it is possible to appropriately explore modular fund allocation methods. Instead of setting overly detailed budgets, budgets can be established according to usage direction modules, and managed in blocks based on usage directions. It should be noted that budgets themselves are reliable methods to ensure normal fund utilization and useful approaches to guarantee fund usage risks. Therefore, when exploring appropriate relaxations in budget management scope in small areas, the principle of "establishing new systems before abolishing old ones" should be followed, proceeding with small but quick steps, while strengthening mid-term and post-event supervision and main responsibilities.

### *2.4 In strengthening focused investments, when funds are limited but demands are numerous, various market entities can be guided to adopt focused fund utilization methods*

When funds are limited but expected expenditure scopes are large, focused investment is one of the effective methods for fund utilization. Investing funds in key areas and critical links can maximize fund utilization efficiency. After investing funds in key demands, normal operation with minimal investment can be ensured to the greatest extent, allowing initial investment returns to be reinvested in the next key areas. In the entire investment process of facility agriculture, limited funds can be invested in key demands, such as necessary operational investments for major projects, shared infrastructure investments for facility agriculture, subsidy investments that meet strategic requirements and development directions, and fund investments for emergency capital guarantee pools. In the process of focused fund utilization, it should be noted that focused investment does not mean exclusive investment. The proportion and scope of focused fund usage should be balanced. During the exploration process, whether focused investment intensity affects the foundational and long-term development of facility agriculture can be used as a judgment method, while paying attention to the decisive role of the market in resource allocation.

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## 3. Analysis and Countermeasures for Financing Difficulties

Financing is an important way to ensure sufficient funding sources, guarantee normal operation of facility agriculture projects, and promote high-quality projects to expand production scale, improve technology and production processes. Currently, financing difficulties are manifested as insufficient continuity of original project capital investments, limited capacity for project scale expansion, few iterations of technology and production processes, and excessively short holding periods for high-quality projects.

Financing difficulties and capital investment difficulties are closely related internally. Besides the shared macro causes of capital investment difficulties, specific reasons also include insufficient financing sources, unsmooth financing channels, and room for improvement in financing quality for various market entities, especially SMEs.

To address the financing difficulties, measures can be taken from the following aspects as illustrated in Figure 2.

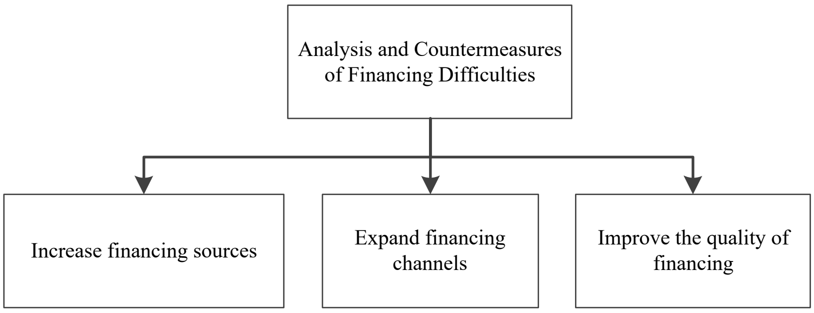


*Figure 2 Policy suggestions for financing difficulty problems*

### *3.1 In increasing financing sources [7], enterprises can be guided to connect with various policy supports and bank advantages for facility agriculture enterprise financing*

At the current stage, various policies strongly support technology-oriented, green, high-quality, and new-type SMEs. Banks have abundant capital reserves and large capacities, with generally low LPRs, showing strong willingness to promote loans and capital circulation. These policy and bank factors create favorable conditions for relatively low financing difficulty and costs through banking channels. Therefore, it is necessary to fully guide and connect funding demanders to utilize current banking advantages in financing difficulty and costs. Various facility agriculture enterprises should be guided to use discounted loans and credit guarantees, highlighting technology, green, high-quality, and innovative elements of facility agriculture to connect with banks for financing and loans. In the process of connecting enterprise financing, attention should be paid to the decisive role of the market in resource allocation, clarifying the authority for promoting connections.

### *3.2 In expanding financing channels, pilot programs can be implemented to promote flexible monetization of agricultural resources to expand collateral scope*

Providing collateral is a requirement for most financing channels and an effective means to reduce non-performing loan ratios. For various facility agriculture enterprises, besides factory buildings, equipment, and technology, various agricultural resources are also important production factors and value embodiments. However, unlike factory buildings and equipment, agricultural resources lack clear valuation systems, making them unable to participate more flexibly and appropriately in financing processes as collateral, thereby affecting the financing levels of facility agriculture enterprises. Government-led pilot programs for flexible monetization of agricultural resources can enhance the credibility and public trust in monetization and valuation, playing a foundational role in agricultural development.

### *3.3 In improving financing quality, increasing official financing success rates can be combined with practical supervision of private financing*

Official financing has strong reliability, high controllable risks, and good standardized management, but it also has problems such as low efficiency and complex procedures. Therefore, for official

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financing, efforts should be made to promote openness in financing channels, methods, and processes, utilizing electronic and information technology means to improve financing efficiency and reduce financing cycles. Private financing methods are flexible and diverse, with high approval efficiency and fast financing speeds, but they have significant room for improvement in supervision, compliance, and legality. Legal private financing should be protected and supervised more strictly, especially with strengthened mid-term and post-event supervision, while illegal private financing must be handled according to laws and regulations.

## 4. Conclusion

Laibin City has enormous potential, sufficient stamina, and broad development space for facility agriculture. Developing Laibin's facility agriculture well is a powerful starting point and important direction for promoting rural revitalization. Faced with difficulties in large investment demands, comprehensive measures can be explored in driving SME investments, expanding funding sources, improving government fund investment and utilization efficiency, and addressing numerous demands with limited funds. For financing difficulties, coordinated pilot programs can be advanced in increasing financing sources, expanding financing channels, and improving financing quality. As long as all parties play their roles well, pay attention to implementation, and improve understanding through joint efforts, the construction level of Laibin's facility agriculture can be further enhanced, and the construction and development of rural revitalization in Laibin can be further promoted.

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