

# *Digital Financial Transformation: The Logic and Innovative Path for Empowering Rural Revitalization—Guangdong as a Case Study*

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**Abstract:** In 2024, the Chinese government emphasized promoting the Rural Revitalization Strategy, focusing on leveraging local resources and developing rural industries, while further allocating digital financial resources to address "Agriculture, Farmer, and Rural Area" issues. With the rapid advancement of digital finance, its role in supporting rural revitalization, especially in enhancing the development of rural industries in Guangdong, has grown crucial. However, challenges persist in Guangdong, including limited financial service coverage, inadequate infrastructure for digital transformation, and inefficient use of financial data. This paper explores how digital finance drives resource integration and value addition in rural revitalization in Guangdong, analyzing its role in marketing innovation and digital transformation. Using case studies, it examines the challenges and offers strategic recommendations on product innovation, policy support, and digital talent development to further empower rural revitalization.

## 1. Introduction

Digital finance has accelerated rural industry development under the Rural Revitalization Strategy. China's 2023 "One Village, One Product" policy reports 4,068 demonstration villages, with 199 towns and 306 villages achieving over one billion yuan in output [1]. Guangdong Province saw an 82.5% rise in agricultural output from 2012 to 2021 [2]. However, challenges such as limited internet access and insufficient financial services in remote areas will surely constrain the full potential of digital finance in the future.

This paper explores how digital finance can drive rural revitalization in Guangdong by integrating resources and creating value. It analyzes the mechanisms and challenges of digital finance in supporting rural industries and provides recommendations to enhance the Rural Revitalization Strategy.

## 2. Academic Researches on Digital Finance Empowering Agriculture

Academic research indicates that digital inclusive finance significantly promotes rural

revitalization by expanding financial services and usage. Lu and Du highlighted its role in fostering enterprise innovation, encouraging entrepreneurship, and increasing income, which are key micro-mechanisms. Additionally, it contributes to narrowing the urban-rural income gap and reducing regional income inequality. [3] Tian H, et al. (2024) found that digital finance empowers rural industrial revitalization, particularly in central and western counties, major agricultural areas, and poverty-stricken regions. [4] Chen Ping et al. (2023) also observed that digital finance supports industrial revitalization by promoting capital accumulation and reducing income gaps. [5]

Despite its impact, digital inclusive finance faces challenges, including limited technological support, inadequate risk supervision, and low financial literacy. [6] Xin and Xing(2022) suggest that strengthening infrastructure, improving risk management, enhancing financial literacy, and promoting agricultural data sharing are necessary steps. [7] Regional disparities in its effectiveness are evident, with digital finance having a greater impact in eastern and central provinces than in remote western areas, according to He (2020). [8] As such, differentiated support policies based on regional needs are essential.

### 3. The Basic Logic of Digital Finance Empowering Rural Revitalization

The financial service pain points in Guangdong's rural revitalization mainly in three areas, which shown in Figure 1:

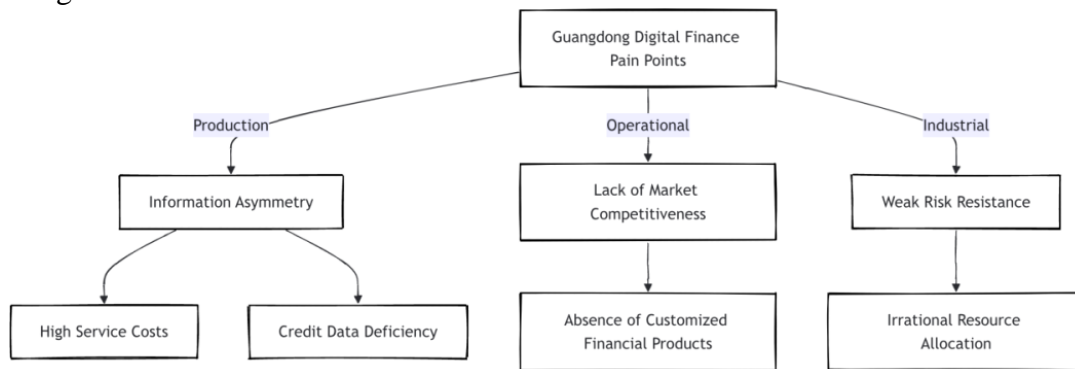


Figure 1: The Financial Service Pain Points in Guangdong'S Rural Revitalization

In the production system, information asymmetry between farmers and financial institutions leads to high service costs and lack of credit data, hindering precise financing for rural industries. At the operational level, agricultural entities lack market competitiveness and tailored financial support, resulting in low efficiency. On the industrial level, rural industries face risks such as market volatility and disasters, leading to unstable supply chains and impacting sustainable rural development.

To resolve above pain points, the transformation of digital finance and innovation in financial marketing will inject new vitality into rural financial services and enable the following empowerment:

#### (1) Digital Financial Optimize the characteristic Agricultural Production

At the production level, digital financial marketing enhances the production efficiency of characteristic agriculture in Guangdong by reducing costs and optimizing resource allocation. For example, in Meizhou, Guangdong, the digital financial platform "Yue Nong E-loan" provides personalized loan services for pomelo farmers, using big data to assess farmers' credit and offer microloans. Farmers can quickly raise funds to purchase modern agricultural equipment, such as automated irrigation systems and crop protection drones, thereby achieving digital management of agricultural production and significantly reducing traditional labor costs.

Furthermore, digital marketing has expanded the sales channels for agricultural products,

breaking regional limitations. Pomelo farmers in Meixian District have leveraged short video platforms for live-streaming sales, directly bringing fresh pomelos to the national market, effectively avoiding the problem of unsold agricultural products. Live-streaming e-commerce not only reduces the costs in the distribution process but also generates higher market added value for agricultural products. This model has effectively enhanced the competitiveness of Meizhou's special agriculture, injecting new vitality into rural revitalization.

(2) Digital Financial Promotes the Integration and Upgrading of the Industrial Chain

At the operational level, digital finance helps agricultural entities enhance their market competitiveness. Leveraging Porter's Diamond Model, financial institutions use digital marketing tools to offer customized financial products to agricultural cooperatives and enterprises, meeting diverse and flexible financing needs. For example, pomelo farmers in Meizhou have varying funding requirements at different stages of cultivation. Local financial institutions, in collaboration with digital platforms, launched the "Pomelo Farmers Customized Loan" program, which flexibly adjusts loan schemes according to the planting cycle, ensuring a stable cash flow. This precise financial service not only improves farmers' market competitiveness but also integrates production and sales data through digital means, providing pomelo farmers with full-chain support.

(3) Digital Financial Enhances the Risk Resistance Capacity of Rural Industries

In industrial system development, digital finance has significantly facilitated the clustering and branding of rural industries, thereby enhancing their overall resilience to risks (Seen in Figure 2). For example, the “Agricultural Science and Technology Park” in Shanwei City has attracted social capital through digital financial platforms to invest in specialty agricultural projects. This initiative has not only optimized the allocation of regional agricultural resources but also enabled the seamless integration of technology, capital, and industry chains, leading to the formation of a regional agricultural industry cluster. In the event of market fluctuations or unforeseen risks, enterprises within the cluster can leverage the risk-sharing mechanisms to mitigate individual risks faced by farmers or businesses.

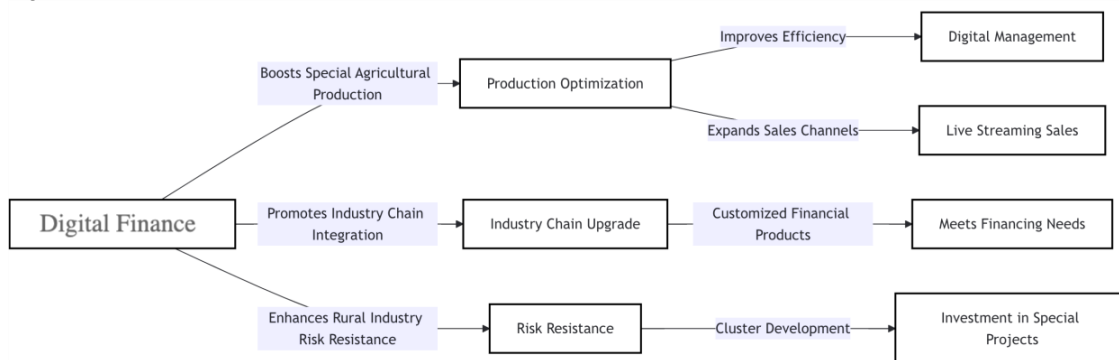


Figure 2: Digital Finance’s Role in Enhancing the Risk Resistance Capacity

Additionally, digital financial marketing plays a crucial role in brand development. Through digital platforms, several specialty agricultural products in Guangdong have successfully established branded operations. For instance, Xijiang Tribute Tea in Yunfu City has utilized digital financial services on e-commerce platforms to attract investment, enhance brand visibility, and increase market competitiveness, thereby strengthening the stability and risk resistance of the industry.

**4. Innovative Path for Digital Finance Empowering in Rural Specialty Industries**

(1) Fostering the Two-Way Development of Local and External Digital Financial Talent

Talent is a key driver of rural revitalization through digital finance, with a focus on local talent development. In Deqing County, Zhaoqing City, the government has partnered with Guangdong Polytechnic University to offer a "Rural Digital Financial Skills Training Program" for agricultural leaders and farmer cooperatives, helping farmers enhance their digital skills and promoting products like Deqing Tribute Tangerine.

External experts also play a role in bridging knowledge gaps. In Liannan Yao Autonomous County, Qingyuan City, the "Digital Financial Talent to the Countryside Program" brings professionals from urban financial institutions to provide loan guidance and financial consulting, improving supply chain services and farmers' financial literacy.

Additionally, in Raoping County, Chaozhou City, the local government has established an "E-commerce Incubation Base" to train returning youth in selling local specialties like Chaozhou embroidery via live-streaming platforms. This initiative strengthens product branding, creates jobs, and boosts rural economic growth.

#### (2) Building a Multi-Level Digital Financial Regulatory System

A strong regulatory framework is crucial for promoting rural industry development through digital finance. For instance, Xinyi City in Guangdong launched the "Rural Credit Cloud Supervision Platform," allowing farmers to report financial violations online, ensuring transparency and timely risk management. In Suixi County, local authorities regularly inspect digital financial institutions and collaborate with village committees to monitor loan usage and prevent misuse.

Violations are swiftly addressed according to legal procedures, maintaining market order. Additionally, Longgang District in Shenzhen has applied urban regulatory practices to rural areas, establishing detailed standards for digital finance. These measures strengthen the rural financial ecosystem, supporting the sustainable development of specialty industries.

#### (3) Promoting the Diversified Innovation of Digital Financial Products

Innovation in digital finance is key to empowering rural industries. Customized financial products are essential. For example, in Shixing County, Shaoguan City, Guangdong, the Agricultural Bank of China, in collaboration with the local government, launched the "Tea Farmer Credit Loan," which adjusts loan conditions based on farmers' production cycles and credit ratings, effectively addressing the short-term capital turnover problem.

For farmers lacking traditional financing options, the "Hakka Microloan" program in Wuhua County, Meizhou City, Guangdong simplifies loan approval by using villagers' credit scores, providing easy access to financing and promoting local specialty industries.

Moreover, the integration of digital finance with modern technology is progressing. In Shunde, Guangdong, the "Shunde Fisheries E-Loan" uses IoT technology to monitor farming data, accurately assessing loan amounts and reducing financial risks in aquaculture while improving loan approval efficiency.

#### (4) Comprehensive Digital Transformation of Financial Institutions

The digital transformation of financial institutions is essential for improving rural financial services. For example, Zhongshan Rural Commercial Bank in Guangdong implemented digital reforms, streamlining rural credit approvals with intelligent systems.

To address information asymmetry, data analysis supports specialty industries. In Yangshan County, Qingyuan City, the local rural credit cooperative introduced the "Yangshan Specialty Industry Loan," using big data to provide financial support for farmers. While, digital technology also modernizes rural industries. In Longmen County, Guangdong, the Rural Commercial Bank launched the "Longmen Smart Agriculture Loan," integrating farmers' data to offer targeted financial services, reducing risks and promoting specialty industries like Longmen "beard chicken".

## 5. Conclusion

Digital financial marketing plays a vital role in promoting high-quality rural economic development. It reduces transaction costs in the production system through data analysis and intelligent services, expands sales channels and promotes industrial integration in the operation system, and strengthens industry resilience in the industrial system.

Key to enabling digital financial marketing in rural revitalization are the cultivation of digital financial talent, enhanced regulation, product innovation, improved infrastructure, and the digital transformation of financial institutions. These efforts provide replicable models for rural revitalization. Moving forward, optimizing digital financial marketing strategies will foster the mutually beneficial development of rural economies and digital finance, advancing comprehensive rural revitalization.

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