

Research on the Pathways of Digital Inclusive Finance Empowering Rural Revitalization Under Party-building Leadership: A Case Study of Lishui

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Abstract: Under the rural revitalization strategy, digital inclusive finance serves as a critical driver for modernizing agriculture and rural areas. Drawing on Lishui's innovative "Party-building-integrated digital finance" model, this study examines its closed-loop development in financial infrastructure optimization, credit system enhancement, and industrial chain financial services. Through Lishui's case, we clarify the catalytic role of Party-led mechanisms in agricultural financial reform, analyze collaboration pathways among multiple stakeholders, and propose strategies to address challenges, offering insights for constructing a "policy-technology-industry" empowerment system in similar regions.

Keywords: Digital inclusive finance, Party-building leadership, Rural revitalization, Financial reform

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1 Introduction

1.1 Background and Value Positioning

The rural revitalization strategy requires upgraded financial services. The 20th National Congress of the Communist Party of China highlighted the need for robust rural financial systems. Digital inclusive finance addresses three traditional rural challenges: financial resource imbalance, financing barriers for small and medium-sized enterprises, and payment inefficiency. Technologies like artificial intelligence further reshape agricultural value chains and regional development through financial product innovation.

As a mountainous region, Lishui pioneered a "Party organization-led government-bank-enterprise collaboration" model, advancing equitable financial resource allocation and service networks. By strengthening grassroots Party policy implementation and interdepartmental coordination, this model forms a tailored financial ecosystem, offering empirical insights for financial reforms in China's county-level economies.

1.2 Research Orientation

This study focuses on three core objectives:

(1) Deconstructing the functional positioning and operational mechanisms of Party organizations in digital financial reform.

(2) Systematically evaluating Lishui's accumulated achievements in infrastructure iteration, credit system optimization, and supply chain financial innovation.

(3) Proposing integrated solutions combining institutional optimization and technological innovation to address challenges such as insufficient penetration of key technologies, persistent digital divides, and regulatory misalignment, thereby providing theoretical and practical support for modernizing rural financial systems.

1.3 Research Methodology

This study employs diverse methodologies to ensure scientific rigor, systematicity, and practicality. The specific methods include:

- (1) Literature Analysis: Systematically reviewing domestic and international literature on digital inclusive finance, Party-building-led rural revitalization, and rural financial reform to construct the theoretical framework.
- (2) Policy Analysis: Interpreting the guiding role of national and local policy documents on rural financial development.
- (3) Case Study: Selecting Lishui City as a representative case, combining field investigations, in-depth interviews, and data analysis to comprehensively examine its digital inclusive finance practices.

2 Theoretical Foundations and Policy Evolution

2.1 Theoretical Foundations

This study adopts a multi-theoretical perspective: first, it employs Inclusive Finance Theory to demonstrate the enhancement effect of financial inclusivity on rural economies; second, it integrates Fintech Revolution Theory to clarify the implementation pathways of technological empowerment; third, it applies Political Party Integration Theory to reveal the decisive role of Party organizations in policy mobilization and resource coordination. A tripartite theoretical analysis reveals that innovative practices in digital inclusive finance fundamentally embody the concrete manifestation of modernized governance capacity in the financial sector.

2.2 Policy Evolution

In recent years, the state has prioritized digital inclusive finance as a strategic tool for rural revitalization, advancing systemic reforms through unified top-level policymaking. Key national initiatives include:

- Promoting Inclusive Finance Development Plan (2016–2020): Expanded rural financial service coverage and supported digital fintech applications.
- Rural Revitalization Strategic Plan (2018–2022): Reinforced rural financial infrastructure and promoted integrated rural industry development.
- Digital Inclusive Finance Development Plan (2022–2025): Emphasized digital technologies' role in rural finance, with measures for credit information sharing and online credit models.

Aligned with national directives, Zhejiang Province implemented localized policies such as the Zhejiang Digital Economy Development Plan (2021–2025), fostering fintech integration with agricultural development and establishing digital credit ecosystems. Lishui City adopted a dual-driven "Credit Villages + Digital Inclusive Finance" strategy, developing farmer credit databases through partnerships with Zhejiang Rural Commercial Bank and Ant Group, which enhanced rural digital credit, insurance, and payment services.

3 Practical Models of Digital Inclusive Finance Under Party-Building Leadership: A Case Study of Lishui

3.1 Governance Architecture of Digital Inclusive Finance Under Party-Building Leadership

Lishui City has established an innovative four-dimensional governance framework comprising policy design, technological empowerment, institutional collaboration, and grassroots execution. This multi-tiered system integrates financial resource allocation through targeted initiatives. Through establishing a "Digital Financial Reform Pilot Zone," the city has attracted leading tech enterprises, such as Ant Financial Services Group, which provide critical blockchain infrastructure. At the organizational level, village-level Party branches operate "Financial Service Vanguard Teams" to manage credit assessments and policy implementation. Collectively, this framework addresses the "last-mile" challenges of financial service delivery in mountainous regions.

3.2 Key Models of Digital Inclusive Finance Empowering Rural Revitalization in Lishui

Under the centralized leadership of Party organizations, Lishui City has developed a multi-dimensional digital financial support system through three innovative approaches. First, collateral-free financing services utilize a multi-dimensional

credit evaluation model, replacing traditional mortgages with digital behavioral assessments to expand funding channels for new agricultural businesses. Second, adaptive smart terminals have optimized rural payment ecosystems, achieving full mobile payment coverage across agricultural markets. Third, blockchain and smart contract technologies underpin the integration of ecological agricultural products with supply chain finance, enabling tailored pledge financing for specialty brands. Concurrently, a machine learning-based risk control platform enhances agricultural insurance efficiency and credit risk management precision, closing innovation gaps in rural financial services.

3.3 Outcomes of Digital Inclusive Finance Practices in Lishui

Lishui's digital finance system has driven rural revitalization through four key achievements. First, credit village evaluations and farmer certification standards significantly expanded financial service coverage. Second, mobile payment terminals achieved over 85% utilization rates, accelerating rural commerce digitization. Third, the combined growth of digital credit and agricultural supply chain finance sustained agricultural industry modernization. Finally, financial literacy programs reduced fraud cases by 20% while enhancing both service efficiency and security protocols.

3.4 Challenges in Lishui's Digital Inclusive Finance Development

Persisting challenges in Lishui's digital inclusive finance transformation include:

Geographically constrained infrastructure contradictions necessitating urgent resolution, particularly network coverage gaps and terminal deployment blind spots in mountainous regions that hinder service accessibility.

Prominent generational digital divides among elderly populations, leading to gradient disparities in technology adoption and marked differentials in digital product promotion effectiveness.

Structural tensions arising from rapid technological advancement outpacing regulatory updates, requiring systemic breakthroughs in data asset ownership norms and transaction security mechanisms, thereby posing critical challenges for synchronizing technological empowerment and risk governance capabilities during the transitional phase.

4 Optimization Pathways for Digital Inclusive Finance Empowering Rural Revitalization Under Party-building Leadership: A Case Study of Lishui

4.1 Rural Financial Innovation Model Under Party-building Leadership

Grassroots Party organizations lead a tripartite governance model (government-bank-village) through integrated Party-finance coordination. This framework enables systematic policy implementation, financial literacy programs, and credit capacity building. The "Credit Cell Project" broadens farmers' financing access by evaluating credit behaviors, synergizing collective rural economies with financial services.

4.2 Promotion of Rural Digital Payment Systems and Agricultural Supply Chain Finance

Innovations in digital payments and supply chain finance reinforce rural development. The "Lishui Shàngēng" platform bridges cloud settlement systems with physical supply chains, digitizing financing for production-to-sales cycles. Mobile payment adoption at agricultural hubs, coupled with tools like warehouse receipt financing and order pledging, diversifies funding sources and aligns production timelines with capital flows.

4.3 Fintech Empowerment of Agricultural Insurance and Risk Management

A blockchain-based insurance service platform creates a novel claim response mechanism, enabling coordinated chain-level processes for disaster loss verification and fund disbursement. A risk control platform integrating multi-source data generates a multi-tier credit evaluation system through intelligent modeling, forming a full-process dynamic early-warning network.

4.4 Outcomes and Challenges

Current practices demonstrate exemplary effects in expanding service coverage, deepening industrial chain support, and enhancing farmers' financial capabilities. However, challenges require urgent resolution: infrastructure disparities

across mountainous regions, fragmented technology adoption among demographic groups, and lagging risk prevention mechanisms for innovative services. A multi-tiered solution framework is essential to consolidate transformative achievements.

5 Practical Challenges of Digital Inclusive Finance Advancing Rural Revitalization Under Party-building Leadership

5.1 Coverage Bottlenecks in Digital Infrastructure and Inclusive Finance

Significant urban-rural digital divides persist, with network coverage gaps and terminal deployment deficiencies in remote mountainous areas. Monitoring data indicate that 30% of rural residents remain outside the coverage of digital financial services, severely hindering the physical implementation of inclusive finance.

5.2 Intergenerational Digital Literacy Disparities

Age-based differences in technology adoption are pronounced, with elderly populations exhibiting operational cognitive delays and technological anxiety. Existing educational interventions fail to effectively improve overall rural digital literacy due to mismatches between knowledge delivery intensity and individual learning capacities.

5.3 Multidimensional Imbalances in Financial Service Provision

Agricultural credit products lack diversity, and innovative financial tools lag behind industrial demands. Existing risk control mechanisms reveal vulnerabilities in digital scenarios, where information asymmetry and inadequate adaptability of evaluation models fracture risk transmission chains, necessitating flexible prevention frameworks.

5.4 Dynamic Tensions Between Regulatory Systems and Technological Innovation

The rapid acceleration of technological empowerment and delayed institutional development create structural friction. Current regulatory approaches for emerging financial formats lack full-process integration. Farmers face dual risks in digital transactions: technological application hazards and insufficient rights safeguards, requiring systemic resolution through regulatory reforms.

5.5 Practical Barriers to Industry-Finance Synergy

Financial services and industrial development exhibit low coupling, with misalignment between innovative products and agricultural production cycles. Existing models inadequately address diverse rural revitalization demands, necessitating deeper scenario-specific customization and product iteration.

6 Implementation Pathways for Digital Inclusive Finance Empowering Rural Revitalization Under Party-building Leadership

6.1 Strengthening Party-building Leadership and Governance System Construction

Clarify the strategic positioning of Party organizations in rural financial governance, establish a cross-level financial policy transmission network, and achieve systematic alignment between municipal planning and village-level service stations. Implement the "Party-building + Finance" collaborative model, create a Party-member Responsibility Field Mechanism, refine the linkage system between financial institutions and village Party organizations, and incorporate financial service outcomes into the Party-government performance evaluation framework.

6.2 Improving Rural Infrastructure and Digital Financial Services

Prioritize enhancing electronic payment coverage in remote areas by deploying multifunctional financial service terminal devices that complement the resources of Party-Mass Service Centers. Construct financial service stations integrating 12 basic functional modules (e.g., credit evaluation and fund application), providing intelligent operational guidance.

6.3 Promoting Integration of Fintech and Industrial Chains

Develop stepped financing products tailored to specialized agriculture, establishing capital flow models synchronized with production cycles. Optimize intelligent risk control systems by expanding crop growth data collection dimensions and building multi-parameter risk assessment matrices.

6.4 Innovating Rural Financial Products and Credit System Development

Design differentiated credit products and broaden insurance coverage for specialty agriculture. Consolidate multi-dimensional data (e.g., land transfers and e-commerce sales) to establish a regular update mechanism for village-level credit archives. Conduct routine credit literacy training programs to enhance participation from new agricultural business entities.

6.5 Enhancing Financial Regulation and Risk Control Systems

Upgrade regulatory technology platforms to strengthen penetrative monitoring of emerging financial formats. Formulate standardized smart contract procedures and establish automated risk early-warning mechanisms. Deploy village-level financial dispute mediation teams and build a case law database to improve risk resolution efficiency.

7 Conclusions and Prospects

7.1 Research Conclusions

The study demonstrates that the synergistic effect of Party-government forces and digital technologies plays a decisive role in optimizing the rural financial ecosystem. Through the Party organization-led cross-institutional collaboration mechanism, resources from administrative services and financial sectors are effectively integrated, forming a closed-loop "policy-technology-service" system. The application of digital tools enhances the efficiency of credit evaluation, capital access, and other key processes. Local innovative practices have been validated in the digital financial implementation of agricultural industry chains.

7.2 Research Contributions

Theoretically, this study constructs a framework integrating Party building as guidance, digital inclusive finance, and rural revitalization. Practically, it summarizes the "Lishui Experience," providing a replicable model for developing digital inclusive finance in mountainous regions.

7.3 Research Limitations

Subject to objective constraints, the study requires further refinement: The sample selection focused on a single innovative demonstration zone, and the universal applicability of its breakthrough policies necessitates validation through comparative multi-regional studies. Additionally, the lag effects of digital finance on economic structures have limited the availability of long-term data.

7.4 Future Research Directions

Subsequent research may deepen across three dimensions: First, improving multi-cycle evaluation frameworks for digital financial benefits, particularly observing the phased impacts of technological iterations on rural industrial upgrading. Second, exploring adaptive solutions for emerging technologies such as digital identity authentication and distributed ledger technology in county-level credit system development. Third, establishing a coordinated risk prevention and control mechanism for digital finance, combining intelligent monitoring with offline mediation to form a new governance model.

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