

The World's Largest Open Access Agricultural & Applied Economics Digital Library

# This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

### Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<a href="http://ageconsearch.umn.edu">http://ageconsearch.umn.edu</a>
<a href="mailto:aesearch@umn.edu">aesearch@umn.edu</a>

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

## High-quality Development Path of Henan Agriculture and Rural Areas Empowered by Digital Inclusive Finance

#### Ling DING

School of Economics and Management, Henan Agricultural University, Zhengzhou 450046, China

Abstract By studying high-quality development process of Henan agriculture and rural areas empowered by digital inclusive finance, it is found that the construction of digital financial infrastructure in Henan Province is relatively complete, and the level of deposit and loan of rural enterprises and farmers is constantly improving, and the market and government are constantly upgrading the financial risk insurance compensation mechanism. At the same time, there are also problems such as insufficient demand and supply of digital finance, single digital financial products, and weak market supervision. Based on this, some implementation paths are proposed, such as continuing to strengthen the construction of rural financial infrastructure in Henan Province, improving farmers' financial literacy, and enriching digital financial products and services. The government should continue to improve the construction of market system, and broaden the market supervision and management, to actively promote the digitalization of agricultural finance to enable the high-quality development of agriculture and rural areas in Henan Province.

Key words Digital economy, Digital inclusive finance, High-quality development, Agricultural and rural development

#### 1 Introduction

With the rapid development of the digital economy, inclusive financial services have become the new focus of the development of the financial industry. Digital inclusive finance combines digital technology and inclusive finance, enabling financial services to reach the goal of benefiting the public with the support of digital technology represented by big data, cloud computing, artificial intelligence and blockchain<sup>[1]</sup>. Digital inclusive finance can not only accurately identify risks and quickly process data, but also greatly save costs compared with traditional operations. A series of applications such as mobile payment, micro-credit and internet insurance developed by it can benefit the public and facilitate life. According to the Analysis Report of Inclusive Finance Indexes in China (2020) released by the People's Bank of China, China's digital inclusive finance is constantly sinking into county and rural areas<sup>[2]</sup>, and the service objects have also expanded from the original financial poverty alleviation to small and micro enterprises, "three rural" customers, etc. Especially in recent years, China has vigorously supported poverty alleviation and carried out rural revitalization, and assisted the excellent experience of financial inclusion in the balanced and optimized development of the rural real economic structure. Moreover, digital inclusive finance can significantly improve the high-quality development level of rural industries<sup>[3]</sup>. When the COVID-19 broke out in 2020, digital inclusive finance played an important role in the production and circulation of agricultural products. However, as a major agricultural province and important granary in China, Henan Province is a key province to solve the "three rural" problems in the new era. The construction and promotion of digital inclusive finance in rural areas still has many problems, such as insufficient supply, single service and inadequate supervision, which seriously restricts the high-quality development of agriculture and rural areas. Therefore, it is of great practical significance to learn from the rich experience of the development of urban-rural finance and inclusive finance and fully understand the problems and shortcomings of Henan Province in the process of promoting high-quality development by rural digital inclusive finance for comprehensively promoting rural revitalization and accelerating agricultural and rural modernization.

#### 2 Achievements of high-quality development of agriculture and rural areas empowered by digital inclusive finance

Recently, the 20th National Congress of the Communist Party of China was successfully held in Beijing. It is still the top priority of China's development and progress to comprehensively promote rural revitalization and high-quality development of agriculture and rural areas, and the development of rural finance is still the core of rural economic development in the new era. In recent years, Henan Province has insisted on taking digital rural construction as the priority development direction to promote rural revitalization and high-quality development of agricultural and rural areas, and has made significant achievements. (i) It is the increase in the number of agriculture-related institutions. At present, the total number of county-level banking institutions in Henan Province is still growing, and the number of rural banks has increased from more than 50 in 2011 to more than 80. (ii) The level of rural deposits and loans has improved, and the number of financial service products has increased. In the end of 2020, balance of various deposits of county-level financial institutions in Henan was 3 147.33

Received: November 12, 2022 Accepted: January 5, 2023
Ling DING, master candidate, research fields: enterprise management, management accounting, and rural finance.

billion yuan, and loan balance was 1 735.705 billion yuan, which increased by 1.8 times than 2015<sup>[4]</sup>. By 2021, agricultural insurance realized the signing premium of 6.326 billion yuan in Henan Province, which increased by 12.9%. It provided 156.748 billion yuan of risk assurance for farmers, which increased by 16.89% than 2020<sup>[5]</sup>. (iii) In 2015, the largest rural financial reform pilot zone was opened in Henan Province [6], which provided the condition for comprehensively deepening the reform of the financial system, and continuing to explore the path of innovative and sustainable rural development in major grain and agricultural provinces. In 2022, the Central Reform Commission deliberated and adopted the Implementation Opinions on Promoting the High-quality Development of Inclusive Finance, which provided policy support for digital technology enabling inclusive finance, better entering the countryside, and serving farmers. (iv) Seen from R&D data, the County-level Digital Rural Index (2018) issued by New Rural Development Research Institute of Peking University and Ali Research Institute<sup>[7]</sup> displayed that the county-level digital financial infrastructure index of Henan Province is 94.52, 15 percentage points higher than the county-level digital infrastructure index of 82.23. Additionally, digital inclusive financial index developed by Peking University displayed that the county-level digital finance in Henan Province was 46.34 in 2014, and 119.73 in 2021, an increase of 156.72% [8]. Among them, the use efficiency of rural credit and rural digital finance has the highest growth rate, both reaching more than 200%. In 2022, the 20th National Congress of the CPC drew a new blueprint for comprehensively promoting rural revitalization and high-quality development of agriculture and rural areas. The development of rural finance is still a heavy task, and it is still the core of rural economic development in the new era. It needs to continue to play an important role in the construction of a Chinese path to modernization power.

#### 3 Problems

In recent years, Henan Province has spared no effort to deepen the rural financial reform and promote the rural digital transformation, which has achieved significant results and achieved a great improvement in the production and living standards of rural farmers. However, there are still many problems to be solved in the process of development.

3.1 Inadequate supply of rural financial demand Since the 20th century, unbalanced urban and rural development and inadequate rural economic development have become China's biggest economic and social problems. How to play the role of rural finance and rationally allocate financial resources is the key issue in the field of rural economy. As a major agricultural province, Henan Province's rural farmers' finance involves the most common business of fund storage. Based on the strong support of the national government, the level of agricultural scale has gradually improved. Some agricultural enterprises have gradually established, and the scope of financial business has expanded to bank lending and insurance. However, according to the statistics of Henan Ru-

ral Credit Union, the loan amount of farmers and small and medium-sized agricultural product processing enterprises is still at a low level, and the loan amount of farmers generally does not exceed 30 000 yuan, and the amount is small. On the one hand, compared with urban industry, service industry and manufacturing industry, agriculture is an industry with large uncertainties, and the income level of farmers is unstable. The operating conditions of agricultural enterprises are also difficult to count, and the loan procedures of agriculture-related financial institutions are cumbersome and less flexible. On the other hand, rural farmers are rooted in the land, have long relied on social relations such as relatives to solve property problems, lack professional knowledge such as financial tools and financial management, and do not have enough trust in agriculture-related organizations<sup>[9]</sup>. The above factors hinder the development of digital inclusive finance. In addition, due to the self limitations of the agricultural industry, such as the long return period of investment and the small number of investment projects, the investment will and the small amount of investment are low [10], which restricts the development of rural digital finance to some extent.

Defects in the rural financial market environment addition to the problems of improper supply, the development of inclusive finance in rural areas of Henan also has major problems in infrastructure construction, financial market environment, and market supervision system construction. The fundamental problem of rural finance is the rural financial market[11]. In recent years, there have been many incidents of farmers reporting village and town banks in Henan, and many village and town bank shareholders have used third-party platforms to collude and absorb public funds to commit illegal crimes. It can be seen that although the financial risk in Henan Province is generally controllable, there are still huge loopholes in the financial market of rural areas. Regional risk prevention is not in place, and the liquidity risk monitoring and emergency security system has not yet been formed. In addition, with the increase of digital financial organizations, the digital financial system is not standardized, and the security of financial data is poor, which may make it difficult to prevent the occurrence of farmers' personal privacy disclosure. In addition, farmers have little knowledge of inclusive finance, weak risk awareness, and can not accurately identify non-standard financial products, behaviors and operations. In case of a capital security event, the rights and interests of farmers' economic entities can not be guaranteed. It is easy to dampen the enthusiasm of the people and hinder the development of rural digital inclusive finance. Finally, government departments in some regions have inadequate supervision and supervision functions, which cannot guarantee the stability of the financial market, especially for private lending organizations and informal financial organizations. Therefore, it is necessary to constantly improve laws and regulations and market supervision system to build a safe and harmonious digital inclusive financial market environment.

3.3 Inadequate innovation and single product of rural digit**al financial services** In the early stage of promoting the highquality development of agriculture and rural areas, banking agriculture-related financial institutions played an important role in the development of digital inclusive finance in rural areas of Henan Province, such as Henan Rural Credit Union, Postal Savings Bank, etc., which mainly provided funds storage functions for farmers. Later, with the improvement of farmers' living standards, commercial banks such as township banks gradually covered and provided a small amount of loans to farmers. However, the overall rural financial organization structure was single, and the financing channels were few. The operating funds were insufficient, and the types of service products were few, and the flexibility was poor. The rural financial reform was not implemented, and a good link between agricultural institutions and financial institutions, such as credit, securities and insurance was not formed. The innovation of financial equipment, financial products, financial technology and business methods adopted by traditional rural financial institutions is insufficient. In recent years, Henan Province has been promoting agricultural progress under the rural revitalization strategy. Whether it is basic agriculture or agricultural by-products or other industrial chains, it cannot match the increasingly diversified financial needs of Henan farmers. Finally, there is a large gap in the level of financial services between urban and rural areas. This is mainly reflected in the fact that most financial service products are only provided to large-scale rural enterprises with specialized scale that are supported by the state, and it is difficult for ordinary farmers and small enterprises to obtain sufficient funds. Urban financial products such as remittance, financial management, leasing and other businesses are difficult to achieve due to the long term of rural agricultural investment.

## 4 Paths for promoting the high-quality development of agriculture and rural areas empowered by digital inclusive finance

In recent years, in the face of the crisis and challenges brought by the severe and complex economic development environment, Henan Province has deeply implemented the socialist ideology of Xi Jinping in the new era, implemented a sound financial and monetary policy, and actively explored and implemented the path to promote high-quality development of agriculture and rural areas.

**4.1** Strengthening the construction of rural digital financial infrastructure With the rapid economic development of Henan Province, the level of rural digital finance has improved significantly. The most significant performance is the increase in the number and coverage of financial institutions. In the end of 2021, digital inclusive financial station covered 99.1% of administrative villages, and basic inclusive credit covered 87.3% of users, and credit assessment covered 85.5% of farmers. In addition, Henan has achieved the coverage of large-area broadband, optical fiber and 4G networks in rural areas, and further completed the prelimi-

nary layout of digital infrastructure. In the next step, the government should continue to strengthen the construction of hardware facilities of rural digital finance and build a solid foundation for the development of digital finance. On the one hand, it should diversify the construction of digital financial infrastructure as much as possible, and form an accurate connection with farmers' production and consumption needs. On the other hand, it should also pay attention to the actual demand differences between towns and villages in different regions, and carry out targeted construction of digital inclusive financial infrastructure. Especially in remote rural areas, the infrastructure of hardware equipment is relatively small, and the utilization rate is not high, and farmers' participation in the Internet is low.

2023

4.2 Strengthening the institutional construction of rural digital financial market development Financial risks are widespread in the market, and the rural financial industry in Henan Province is no exception. Due to its industry particularity, the financial industry is vulnerable to external influence and high risk of human manipulation. Especially for the rural areas in the new era of rapid development, a complete financial system and financial chain have not yet been formed, and the institutional construction is not complete, which is prone to the phenomenon of uneven distribution of assets, irregular loans, illegal financial operations and so on. Therefore, it is not only necessary to strictly enforce legal supervision, but also to continuously strengthen the institutional construction of rural digital financial market. (i) It should formulate market access standards in line with the actual situation of rural areas in Henan Province, safeguard farmers' rights and interests from the source, and cannot blindly lower the access standards to achieve financial development. (ii) It should flexibly regulate the rural financial market, improve the efficiency and distribution rate of funds, and formulate rules and regulations that are truly beneficial to the people. (iii) It should strengthen the standardization and transparency of rural financial market system construction, timely release market change information, enhance the accuracy and acceptance of farmers' use of information, and commit to digital inclusive finance to promote the high-quality development of agriculture and rural areas in Henan.

4.3 Actively promoting the innovation of rural digital inclusive financial products and services In the process of implementing the rural revitalization strategy and promoting the high-quality development of agriculture and rural areas, Henan Province has constantly innovated the rural financial service system and service mode, which has greatly met the needs of farmers and the new agricultural management theme, but there is still room for progress and optimization in rural digital inclusive finance. (i) It should innovative financing methods. Using the Internet platform, the level of rural financial services could be promoted through crowdfunding, equity financing and other modes to meet the diversified capital needs of farmers. (ii) It should innovate financial services such as digital insurance and wealth management. With the improvement of rural farmers' income level, farmers' awareness

of storage and consumption is also constantly improving. There is more demand for capital and property management and risk prevention. Rural digital financial insurance can meet farmers' savings and increase property income. (iii) According to the needs of different farmers, it should vigorously promote the integration of agricultural insurance and rural credit, further improve the scale and industrialization of agricultural product sales chain, and provide a solid guarantee for expanding agricultural product market sales.

4.4 Actively carrying out the popularization and training of rural farmers' digital finance knowledge The development of digital finance benefits from the rapid development of information technology. China's "Internet + " initiative has benefited the whole country, and 12316 agricultural comprehensive information services have also basically covered all provinces in China. In 2014, it launched the work of information entry into villages and households to build a benefit agriculture information society. According to survey statistics, the financial knowledge level of rural population in Henan is still lower than the growth rate of rural financial development. Therefore, at the stage of rapid development of rural digital inclusive finance, it is still necessary to pay attention to the knowledge level and acceptance of rural farmers, actively carry out knowledge training related to digital finance by taking advantage of diverse forms such as television, radio and internet, develop application software that is simple and easy to learn, guide rural farmers to improve their digital operation level, and truly penetrate digital finance into the production and life of rural farmers. In addition, it should continue to promote safety prevention education, guard against various new forms of financial fraud, improve farmers' awareness of prevention, and pay attention to property security.

4.5 Playing the role of government supervision and financial support to ensure stable and healthy development deepen the reform of rural digital inclusive finance by following the market-oriented approach and the coordinated management of the government. On the one hand, the government should play its role in ensuring the safe development environment of rural digital finance development, encourage diversified investment capital entry methods, and provide a loose and healthy policy environment for the growth and development of financial institutions and non-governmental financial organizations. On the other hand, it should give rural farmers financial support and incentives in all aspects of tax and insurance, so that digital universal finance can truly benefit the people. Moreover, relevant policy subsidies should also be given to financial institutions involving people, and special risk compensation mechanisms should be formed to counter risks. Finally, the government should play its supervisory role, implement unified and classified supervision, strictly implement relevant national laws and policies, formulate local laws and regulations in time to prevent illegal and criminal acts, pay attention to the efficiency and risk of digital finance operation, actively guide and encourage innovation, and improve the overall security and activity of rural digital finance in Henan Province to promote high-quality development of agriculture and rural areas.

In short, in the process of high-quality agricultural and rural development in Henan Province, it should give full play to the endogenous role of rural digital inclusive finance, focus on improving the level of financial services, promote the deep integration of digital finance and the production and life of agricultural and rural farmers in all fields, and jointly build a new trend of digital transformation, innovation and development of rural finance in Henan Province.

#### References

- [1] ZHAI XL. An empirical analysis of the impact of digital inclusive finance on farmers' income; A case study of Qinghai Province [J]. Shanghai Business, 2020(9); 80 -83. (in Chinese).
- [2] WANG L. Subjective financial literacy and financial behavior [D]. Zheng-zhou; Henan University, 2019. (in Chinese).
- [3] QIN ZH, PAN YC. Impact of digital inclusive finance on promoting high-quality development of rural industries[J]. Journal of South China Agricultural University (Social Science Edition), 2022, 21(5): 23 33. (in Chinese).
- [4] Henan Provincial Bureau of Statistics. Analysis of social and economic development of counties in the province [R]. 2021. (in Chinese).
- [5] Henan Provincial Financial Supervision and Administration Bureau. Henan financial industry development report in 2021 [R]. 2021. (in Chinese).
- [6] Henan starting to build the largest rural financial reform pilot zone in China[J]. Information for Deciders Magazine, 2015(16): 12-13. (in Chinese).
- [7] Peking University New Rural Development Research Institute, Ali Research Institute. County-level digital rural index[R]. 2022. (in Chinese).
- [8] Digital Village Project Team of Peking University. Research report of county-level digital rural index (2018) [R]. Beijing: Peking University New Rural Development Research Institute, 2020. (in Chinese).
- [9] GUO SY. On the path of digital finance enabling agricultural high-quality development[J]. Price: Theory & Practice, 2021(12): 102 - 105. (in Chinese).
- [10] GAO Q, GAO SL, SUN Z. Rural digital finance development: Advantages, problems and countermeasures [J]. Rural Finance Research, 2022 (1): 43-49. (in Chinese).
- [11] GOU FM, CHEN DX. Deepening and innovation of rural financial services under the rural rejuvenation strategy: Focusing on the high quality development of rural financial market [J]. Economic Vision, 2021, 40 (4): 55-64. (in Chinese).