Research on Urban-Rural Integration and Regional Coordinated Development of Anqing City, Anhui Province in the Context of Digital Economy

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Abstract

In the context of the rapid development of the digital economy, the promotion of the digital urban-rural integration plan is conducive to the modernisation of rural industrial development and the promotion of regional coordinated development. This project is based on the drive of digital urban-rural integration, using the methods of literature analysis, field research and big data analysis to analyse the process, results of urban-rural integration and regional coordinated development. Under the guidance of the spirit of the Twentieth National Congress, it provides some lessons for the existing problems related to urban-rural integration and regional coordinated development, so as to promote urban-rural integration and regional coordinated development.

Keywords

Digital Economy; Urban-Rural Integration; Regional Coordination.

1. Introduction

In recent years, the digital economy has become an important driving force for global economic development, and is of great strategic significance in promoting high-quality economic development. Meanwhile, in the report of the 20th National Congress of the Communist Party of China (CPC), the status of the real economy as the focus of economic development has been further confirmed, and the report's emphasis on the in-depth integration of the real economy and the digital economy is also a further emphasis on the importance of the digital economy. At the same time, urban-rural integration and coordinated regional development have also become important directions for China's economic development in the new era. Against this backdrop, Anqing City in Anhui Province, China, is deeply promoting the development of the digital economy, urban-rural integration and coordinated regional development, and achieving high-quality economic development and comprehensive social progress.

Anqing is an important industrial city in Anhui Province, located in the middle and lower reaches of the Yangtze River, with unique transport advantages and resource endowments. However, due to the development imbalance between urban and rural areas and the development gap between regions, Anqing still faces many challenges in digital economy development, urban-rural integration and coordinated regional development. The development of digital economy needs to rely on advanced scientific and technological means and innovative modes, while Anqing City has deficiencies in the development of digital economy in terms of technology and talents. At the same time, urban-rural integration and coordinated regional development require the use of modern infrastructure and services, but there are still
deficiencies in the development of transport, medical care, education and other infrastructure areas in Anqing, and the capacity of urban and rural services needs to be upgraded. Therefore, it is necessary to conduct an in-depth study on urban-rural integration and regional coordinated development in Anqing City in the context of the digital economy, in order to explore feasible development paths and modes, to promote urban-rural integration and regional coordinated development, and to realise high-quality economic development and comprehensive social progress. The study has important practical significance and development value by closely integrating the national strategy and the economic and social development of Anqing City.

2. Literature Review

At present, domestic scholars have thought and studied more about the digital economy and regional coordinated development, analysed the current digital economy and regional coordinated development of the two mutual influence and role of the mechanism, the main viewpoints are: the digital economy is based on digital technology to drive all aspects of economic and social innovation and growth, will play an important role in promoting regional economic integration and regional coordinated development of the engine. (Slijuan, 2023). The digital economy has an obvious driving effect on the improvement of regional innovation performance, which is mainly manifested in accelerating the accumulation of human capital, financial development and industrial upgrading. (Tanzhen et al., 2022). The analysis of the relevant mechanism of digital economy affecting regional coordinated development provides theoretical support for the state to formulate relevant policies to achieve the digital economy to serve the coordinated development of the region, which helps the state to develop the digital economy according to the local conditions, purposeful and targeted, and to promote the coordinated development strategy of the region. (Su Yutong, 2022).

Domestic scholars for the digital economy and urban-rural integration of the combination of research and thinking is not a few, the main point of view is that the digital economy as a change in the distribution ratio of factors of production, affecting the socio-economic development of the important economic model, for urban-rural integration development to provide a new path. (Yao Yuchun et al., 2023). The rapid development of digital economy can effectively promote the rational allocation of resources, accelerate the free flow of urban and rural resource factors, and narrow the gap between urban and rural informatisation. (Qian Li, 2023). The digital economy has a positive effect on urban-rural integrated development, bringing new types of resources and new allocation methods, amplifying the rights of microeconomic subjects in the rural market, making urban-rural integrated development possible (Lv Xiaorui, 2023).

At the same time, domestic scholars’ thinking and research on urban-rural integration and regional coordinated development of the digital economy also analyses the current problems in urban-rural integration and regional coordinated development, and the main points are: in recent years, the economic development of the north and the south has continued to expand on the basis of the original larger. In 2017-2021, the proportion of the gross domestic product of the northern region in the national GDP increased from 37.41 percent declined to 35.25%, and the proportion of southern regional GDP in national GDP increased from 62.59% to 64.75%. (Zhou Minliang, 2023). The key reform tasks in the urban and rural land system and the "three rural areas" are still burdensome, and the mechanism of regional coordination and mutual development is still imperfect, making it difficult to adapt to the needs of the strategy of urban-rural integration and coordinated regional development in the new era. (Li Quan, 2023). The gap between urban and rural integration and development has yet to be bridged, and it is difficult for some reform measures to be put into practice, resulting in the problem of
unbalanced urban and rural development still being very prominent, which poses a great challenge to the promotion of common prosperity. (Pang Dan, 2022).

It can be seen that domestic scholars’ thinking and research on digital economy urban-rural integration and regional coordinated development have formed certain results, which has laid a good foundation for the research of this topic. However, the current research mainstream has not yet combined the three for research and investigation. Therefore, the innovation of this paper is reflected in the comprehensive use of existing literature, and on the basis of the original through the field study of Anqing City, Anhui Province, China, the use of digital economy-related knowledge and technology, and the corresponding problems to propose optimisation ways and methods. It promotes the integration of urban and rural areas and the coordinated regional development of Anqing City, and realises the high-quality development of the local economy and the comprehensive progress of the society.


3.1. Promoting Industrial Integration
The digital economy provides a good opportunity for the integrated development of urban and rural areas, allowing for the integration and complementarity of industries. Through the application of digital technologies, urban and rural industries can support each other and develop synergistically. For example, using Internet technology and e-commerce platforms, agricultural products can be sold directly to urban consumers, increasing market access and added value of agricultural products. At the same time, the digital economy can also promote the upgrading and transformation of rural industries and push rural development towards a high value-added industrial chain. Through the support of digital technology, new industries such as agricultural modernisation, rural tourism and agricultural product processing have been developed and expanded, enhancing the competitiveness and development potential of the rural economy.

3.2. Promoting Communication
The digital economy has facilitated the flow and exchange of information between urban and rural areas, breaking down information barriers and providing new opportunities and ways for the sale of agricultural products and rural economic development. First, through channels such as e-commerce platforms and rural e-commerce service stations, farmers can directly promote and sell their agricultural products to urban consumers, realising online and offline sales of agricultural products. This direct information flow not only expands the market coverage of agricultural products, but also increases farmers' income. Secondly, digital technology provides support for brand building and traceability of agricultural products. By establishing an e-commerce platform for agricultural products, consumers can learn detailed information about the origin, cultivation and processing of the products, which increases their trust in the agricultural products. At the same time, digital technology also enables the traceability and tracking of agricultural products to ensure product quality and safety and enhance consumer confidence in purchasing. This transparency and traceability of information plays a positive role in promoting both the sale of agricultural products and consumer protection. In addition, digital technologies provide an online platform for sharing and exchanging agricultural knowledge and technology. Through agricultural big data and Internet technology, farmers can access the latest information on agricultural science and technology, cultivation techniques, pest control and other knowledge to improve agricultural production.
3.3. Promoting Improved Public Services

The development of the digital economy provides new opportunities and ways to improve urban and rural public services, and promotes balanced public services in urban-rural integrated development. First, the sharing and application of digital educational resources can bridge the gap between urban and rural educational resources. By building digital education platforms and providing online education programmes, students in rural areas can have access to a wider range of educational resources, enjoy high-quality educational services, and improve their learning quality and competitiveness. Second, the development of the digital economy has also promoted the improvement of medical services in rural areas. Through telemedicine technology, remote medical consultation, diagnosis and monitoring can be realised, enabling rural residents to enjoy quality medical resources and solving the problems of lack of medical resources and uneven distribution of doctors. At the same time, the application of digital technology can also realise the interconnection of medical data and improve the sharing of medical information and the improvement of medical quality. In addition, the development of the digital economy has also given a boost to public services in rural transport and logistics. Through the construction of intelligent transport systems and the provision of online travel booking services, the transport situation in rural areas has been improved, and transport efficiency and safety have been enhanced. At the same time, the application of digital technology has enhanced the efficiency and reliability of rural logistics, accelerated the transport and marketing of agricultural products, and increased the level of farmers’ earnings and market competitiveness.

4. Urban-rural Integration and Coordinated Regional Development in Anqing City

The problems facing urban-rural integration and regional co-ordinated development in Anqing City mainly include the lack of rural digital talents, weak rural industrial development and unbalanced development of public services.

4.1. Lack of Rural Digital Talent Makes it Difficult to Promote Digitisation

The lack of rural digital talents is a major problem for urban-rural integration and coordinated regional development in Anqing. Due to the lack of information technology talents, it is difficult to promote digital construction in many rural areas, which brings certain obstacles to local economic and social development.

4.2. Weak Rural Industrial Development and Backward Industrial Structure

Weak rural industrial development is also a prominent problem. First, due to the relatively low level of rural economic development, the industrial structure of many rural areas is backward, unable to meet the employment needs and production and living needs of local residents, limiting local development potential and economic vitality. Secondly, the digital convergence of the digital economy and rural industry is not a simple superimposition of the digital economy and rural industry, but rather, the digital economy empowers the whole industrial chain of the rural industry at all stages, guiding the rural industry to deep-level change. At present, the combination of the rural industry and the digital economy is mainly reflected in changing the traditional sales model through online sales and short-video platforms with goods, and has not yet formed a digital, systematic and intelligent digital industry management model, and it is even more difficult to synergistically develop with the urban industry through the online sales of agricultural products and unable to establish a synergistic model of the development of one, two and three industries between urban and rural areas. Thirdly, the development of the rural data and capital factor market is slow, and there is a lack of transformation mechanisms for the large-scale development of data factors, and insufficient attention is paid to the regulation of
digital and capital platforms, and rural data resources are not sufficiently explored, which makes it difficult to effectively help the digital economy play a role in urban-rural integration and development.

### 4.3. Uneven Development of Public Services and Low Level of Infrastructure Development

Uneven development of public services is also one of the problems of urban-rural integration and coordinated regional development in Anqing. First, due to the urban-rural gap and unequal regional development, the level of public service facilities and infrastructure construction in many rural areas is not high enough to meet the survival and development needs of local residents, limiting the quality of life and social development in the area. Second, the degree of digitalisation of basic public services is not deep. After the gradual promotion and popularisation of digital public facilities and basic public services in rural areas, the digital gap between urban and rural areas is changing from a basic gap to a usage gap. Thirdly, farmers’ use of digital technologies and resources mainly remains at the stage of consumption and entertainment, lagging far behind urban residents in terms of the in-depth application of digital basic public services related to production, life and the requirement of more digital capacity and digital literacy.

Therefore, in order to promote urban-rural integration and coordinated regional development in Anqing City, the Government and society should work together to take effective measures, such as strengthening support for digital construction in the countryside, encouraging the development and growth of the rural economy, and raising the level of public services in the countryside, in order to improve the shortcomings of rural development and inject new impetus into urban-rural integration and coordinated regional development.

### 5. Policy Recommendations

#### 5.1. Enhancing Policy Support

The Government can clarify the direction and objectives of urban-rural integration development and regulate the responsibilities and functions of the Government by formulating clearer and more specific policy documents. In addition, it should increase financial input, increase financial support for urban-rural integration projects, encourage enterprises and social capital to participate in investment, and reduce the risks and costs of urban-rural integration development. Establish a special financial support mechanism to provide financial support such as loans, guarantees and risk compensation for enterprises in the digital economy and urban-rural integration, and promote the effective implementation and realisation of policies. At the same time, it will strengthen the supervision and assessment of urban-rural integration development and establish a sound incentive and constraint mechanism to ensure the effective implementation and realisation of policies. In this way, the Government can provide strong guidance and support for urban-rural integration development, promote the application and development of the digital economy in urban-rural integration, and achieve coordinated economic and social development.

#### 5.2. Optimising Digital Infrastructure Development

Governments should increase investment in digital infrastructure development in rural areas to ensure unimpeded digital connectivity between rural areas and cities. This includes strengthening the laying of fibre-optic networks, building wireless network base stations in rural areas and providing high-speed broadband access services to meet the needs of rural residents for digital technology. In addition, it is necessary to promote digital technology applications, such as smart agricultural equipment, distance education and e-commerce, to provide convenient digital services in rural areas. Training and popularisation of digital
technology should be strengthened to improve the digital technology level of rural residents, so that they can better apply digital technology and participate in the development of the digital economy. Through these measures, it is possible to break down the information barriers between urban and rural areas, promote the integrated development of urban and rural areas, and achieve the comprehensive development of the digital economy.

5.3. Cultivating Talent for the Digital Economy

The Government and relevant institutions should formulate effective talent training programmes, strengthen education and training in the field of the digital economy, and enhance the digital literacy and innovation capabilities of urban and rural residents. This includes offering relevant digital economy courses in schools, organising professional training and skills upgrading activities, and fostering people’s ability to master digital technology and innovative thinking. It is necessary to strengthen the introduction of talents for the digital economy, attract outstanding talents to urban and rural areas, and promote the integrated development of the digital economy with urban and rural areas. This can be achieved by establishing talent introduction policies, offering competitive remuneration and welfare packages, and providing a favourable working environment and development opportunities. Co-operate with universities, research institutes and enterprises to establish talent training bases and innovation laboratories to nurture and incubate innovative and entrepreneurial talents in the digital economy. By fostering and introducing digital economy talents, the digital literacy and innovation ability of urban and rural residents can be enhanced, the application and development of the digital economy in the process of urban-rural integration can be promoted, and talent support can be provided for the realisation of coordinated economic and social development.

5.4. Strengthening Synergistic Industrial Development

The Government can promote cooperation between rural speciality industries and digital economy-related industries through policy guidance. Encourage agricultural product processing enterprises to develop agricultural product e-commerce platforms in cooperation with digital technology enterprises, so as to expand the scope of sales of agricultural products. Establish rural industrial parks to attract digital economy-related enterprises to move in and cooperate with local farmers in agricultural product processing, logistics and distribution, etc., so as to realise the industrial chain integration of rural characteristic industries and digital economy industries. The added value and competitiveness of rural characteristic industries can be enhanced through the co-operation model of sharing resources and mutual benefit. In addition, it can also promote rural entrepreneurship and innovation, encourage farmers to start their own businesses, and develop entrepreneurial projects related to the digital economy, such as rural e-commerce and rural tourism platforms. Promote the deep integration of rural characteristic industries with the digital economy to achieve the extension and upgrading of the industrial chain.

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