

Study on Digital Economy for Rural Relative Poverty Governance in Anhui Province

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Abstract: Since the 18th Party Congress, the Chinese government has actively promoted anti-poverty strategies and achieved the goal of poverty eradication as scheduled. However, poverty governance is not over, and the problem of relative poverty still exists. By analyzing the development of digital economy and the current situation of rural relative poverty in Anhui Province, this paper further explores the theoretical mechanism of digital economy for rural relative poverty governance. Finally, four measures are proposed: continuously increasing the construction of digital technology infrastructure, developing entrepreneurship support policies, promoting a fair social income distribution system, and actively promoting the urbanization process, so as to establish a long-term poverty alleviation mechanism to address relative poverty.

Keywords: Digital Economy, Relative Poverty, Entrepreneurship Level, Income Distribution.

1. Introduction

Eliminating poverty and achieving common prosperity is an essential requirement of socialism and an important mission of the Communist Party of China. Since the reform and opening up, China's economy has entered a stage of rapid development, completing the arduous task of eliminating absolute poverty and achieving the goal of building a moderately prosperous society in all aspects. However, China's anti-poverty cause is not over. Take Anhui Province as an example, by the end of 2020, all the poor counties and villages in Anhui Province have been removed, and people's basic needs such as food, clothing and warmth have been solved, but the problem of relative poverty still exists. With the rapid development of digital technologies such as blockchain, cloud computing and artificial intelligence, the digital economy with digital technology as the core productivity gradually penetrates into all fields of human society and becomes a new engine to promote economic growth, and also will play an important role in the study of relative poverty governance. Exploring the study of digital economy for relative poverty governance in rural Anhui Province provides a new perspective on relative poverty research, enriches the existing literature on digital economy, helps to promote sustainable relative poverty alleviation in rural areas, optimizes the existing poverty alleviation policies, consolidates the achievements of poverty eradication in rural Anhui Province, and promotes rural revitalization and common prosperity in an integrated manner.

2. Literature Review

2.1. Current status of foreign research

The term "digital economy" was first introduced by Tapscott, a Canadian scholar, and since then, the definition of digital economy and related studies have generally been conducted based on his research. With the continuous development of digital economy, more and more scholars have started to pay attention to its impact. Azu et al. (2020) found that the development of digital economy has reduced

youth unemployment in West Africa in both the short and long term using data from West Africa; Tranos et al. (2021) analyzed the development history of the UK and pointed out that the development of Internet technology and digital economy can significantly contribute to improvement in economic performance.

2.2. Current status of domestic research

As China's information technology continues to improve, digital poverty reduction has played a huge role in China's efforts to achieve comprehensive poverty eradication. Through big data technology, the government can identify poor households more precisely and propose differentiated measures to help them. Therefore, Chinese scholars have conducted many studies on the digital economy for relative poverty governance in rural Anhui Province, and there are three main categories of literature related to this issue.

2.2.1. Research on the digital economy

The academic research on digital economy mainly includes two aspects, the measurement of digital economy and the economic effect of digital economy development. In order to measure the digital economy, academics have constructed a more accurate digital economy development index based on macro statistics. Xu Xianchun et al. (2020), on the basis of defining the scope of the digital economy, selected products and industries from three dimensions to measure the scale of China's digital economy. It has been generally agreed that the digital economy has positive economic effects, and Fan Hejun and Wu Ting (2021) verified the role of the digital economy in promoting high-quality development through empirical analysis.

2.2.2. Research on relative poverty

Initially, only the concept of absolute poverty was available in academia, but with the development of economy, more and more scholars found that poverty also means suffering from relative exclusion and relative deprivation, so the study of relative poverty was launched. Zuo Stop and Li Shixiong (2020) believe that relative poverty is reflected in the comparison between incomes, and point out that a large proportion of people in rural areas of China are still in relative

poverty. Chen, H. L. et al. (2021) argue that relative poverty is a dynamic concept and its governance needs to be long-term, and that relative poverty reflects the inequality in the living standards of residents.

2.2.3. The study of digital economy for rural relative poverty governance

Through theoretical analysis, Qi Wenhao and Zhang Yuejie (2021) argue that the mechanism of digital economy for high-quality rural development is to break the urban-rural duality structure and innovate the rural development model. The study by Lina Zhang et al. (2021) showed that the digital economy has a significant income-increasing effect, in which the income-increasing effect of rural households is higher than that of urban areas, and the mechanism of the digital economy to increase income is to strengthen the application of Internet.

In summary, there is still room for innovation in the research on the digital economy for relative poverty governance in rural Anhui Province. Previous literature has conducted rich studies on the digital economy and relative poverty, but there is not enough exploration on the digital economy for rural relative poverty governance, so this paper will take Anhui Province as an example to conduct a more in-depth study.

3. The Development of Digital Economy and the Current Situation of Relative Poverty in Rural Anhui Province

3.1. The current situation of digital economy development

3.1.1. The total digital economy continues to grow and become the powerhouse of growth

Data provided by the National Bureau of Statistics and various reports show that the scale of China's digital economy is growing faster than the growth rate of GDP. At present, China's economy is in the process of changing from a factor-driven high-speed growth model to an innovation-driven high-quality development model, and the digital economy, as a new economic form based on data elements, injects new momentum into traditional factors of production and also directly drives the digital upgrade of industries. Thus, the digital economy has become an important driving force for China's economic growth.

3.1.2. Increasing policy support for the digital economy and rapid development of digital infrastructure

Since the 18th Party Congress, the digital economy has undergone a process from focusing on promoting the rapid development and iterative evolution of communication technologies to deep integration in all areas of the economy and society, marking the rise of the digital economy as a national strategy. The proposed new infrastructure has provided new growth momentum for the development of domestic digital economy infrastructure. Currently, new infrastructure has become a key investment area for national and local governments, and 5G communication network construction, data center, cloud computing, artificial intelligence, and industrial internet are becoming the main focus of future layout around the world.

3.1.3. New business and new models in manufacturing industry are emerging

Internet development has accelerated the change of manufacturing production mode, and more and more manufacturing industries integrate the advantages of online and offline resources, carry out new business and new modes such as remote diagnosis and personalized customization, and accelerate the transformation to a new production mode based on the Internet and data-driven. At the same time, cross-border e-commerce has become an important channel for internationalization of manufacturing industry. In recent years, a large number of manufacturing enterprises have actively adopted cross-border e-commerce to expand the market scope of their products. Cross-border e-commerce can not only effectively solve the problem of overcapacity. It can also effectively assist enterprises to connect to the international market.

3.2. The current situation of relative poverty in rural Anhui province

China will completely eliminate absolute poverty in 2020, but the work of poverty eradication in Anhui Province does not end there, and relative poverty still exists. Anhui Province has a large relative poverty population, including a large number of residents hovering near the poverty line, the ability poor, and the invisible poor. With the transformation of absolute poverty to relative poverty, there is a gradual transition from a single measure of poverty by income to a multidimensional one. Therefore, in this paper, when analyzing the current situation of relative poverty in rural Anhui Province, we choose two dimensions of income and consumption to reflect relative poverty more comprehensively.

3.2.1. Income dimension

According to the urban and rural disposable income statistics of Anhui Province from 2011 to 2020, the per capita disposable income of urban residents has been much higher than the per capita disposable income of rural residents, which shows that the income distribution between urban and rural areas is uneven, generating the problem of relative income poverty. In terms of regional distribution, the urban-rural income ratio in southern and central Anhui is smaller than that in northern Anhui, and the overall urban-rural income ratio in economically developed areas is smaller than that in slightly economically backward areas, because the economic policies in more economically developed areas are more reasonable and farmers have more opportunities and channels to improve their income.

3.2.2. Consumption dimension

The per capita consumption expenditure in rural and urban areas of Anhui Province has been steadily increasing during 2011-2020, while the gap between urban and rural consumption in each region has been narrowing. Similar to the urban-rural income ratio, there is also regional heterogeneity in the urban-rural consumption ratio, with urban-rural consumption in southern and central Anhui generally lower than that in northern Anhui. This is because economically developed regions have higher income levels, more advanced consumption consciousness and more convenient transportation, which further promote the consumption of rural residents, and the gap between urban and rural consumption is smaller.

The reasons for the emergence of relative poverty in Anhui

Province can be summarized as the following three: first, institutional efficiency reasons, the People's Republic of China was established relatively short time ago, and it is in the exploratory stage when formulating policies for poverty eradication, and the consideration is not comprehensive; second, the scarcity of human capital, Anhui Province is located inland and has a medium level of economic development, which cannot attract more high-quality human resources; third, regional development differences, within Anhui Province Most of the poverty-stricken areas are in mountainous areas or remote rural areas, and the development of various industries is hindered by the scarce resources in these areas.

4. Theoretical Mechanisms of Digital Economy for Rural Relative Poverty Governance

4.1. Income-generating effects of the digital economy on the poor

The current poverty in China is multidimensional, but economic poverty caused by low income levels is the most obvious aspect. The income increasing effect of the digital economy on the poor is mainly achieved by increasing employment or entrepreneurial opportunities, which in turn raises the income of the poor. The integration and penetration of the digital economy into agriculture has promoted the development of e-commerce for agricultural products, which can effectively eliminate the asymmetry of poor farmers' information about market demand, promote the growth of sales and profits of agricultural products, and thus increase the operating income of poor farmers. In addition, the efficiency-enhancing effect of the digital economy on agriculture can help promote the transfer of surplus rural labor to urban non-agricultural industries for employment and increase wage income.

4.2. The empowering effect of the digital economy on the poor

For a long time, there has been a typical “financial exclusion” in China, which makes it difficult for the poor to access financial resources and achieve wealth growth, or even fall into the poverty trap. With the increasing development of digital technology, digital inclusive finance driven by digitalization is accelerating globally, providing these poor people with diversified financial services such as digital credit, mobile payment and internet insurance. This digital economy-driven “financial empowerment” for the poor has an important role in poverty reduction. The “human capital empowerment effect” of the digital economy effectively alleviates the “capability poverty” of the poor, and contributes to the alleviation of economic poverty through its employment and entrepreneurship inducing effect.

4.3. The precise helping effect of digital economy on poor people

Poverty eradication relies on the internal efforts of the poor, but also cannot be separated from the external precise help from the government and the community. With the development of digital economy, the application of big data technology provides technical means for precise help: first, to carry out early warning screening and dynamic monitoring of poor households to improve the accuracy of poverty

identification; second, to systematically and deeply analyze the social information related to the poor population to formulate scientific, targeted and adaptive help initiatives; third, through real-time sharing and dynamic comparison of big data in multiple fields, to track and monitor the regional and institutions' progress and efficiency in poverty alleviation, and enhance the allocation effect of financial and financial resources for poverty alleviation.

4.4. Optimizing the effect of digital economy on infrastructure and public services in poor areas

The relatively sound rural infrastructure and public services provide a good production and living environment for rural residents and the poor. The huge gap in social and public services between urban and rural areas in China is an important source of poverty generation and development. The development of digital economy has greatly promoted the improvement of infrastructure and public services in poor areas, especially the expansion and application of mobile communication technologies such as Internet, 4G or 5G to poor areas, as well as the penetration of digital economy into education, public health and cultural life in poor areas, which not only help improve the living space of poor people, but also provide a good environment for agricultural production and business activities, employment and entrepreneurship, which plays an important role in poverty alleviation.

5. Measures for the Digital Economy to Promote Relative Poverty Governance in Rural Anhui Province

5.1. Continuing to increase digital technology infrastructure development

One important reason why rural residents have low income and are in poverty is the low level of rural digital economy. To improve the rural digital level, the first and foremost thing is to improve the rural information infrastructure, especially in remote mountainous areas, so as to lay a good foundation for the development of digital economy. The government should provide financial support, actively invest in the construction of information infrastructure, and increase the placement of Internet equipment in rural areas, with equal emphasis on quantity and quality. At the same time, reasonable Internet tariff standards should be set so that rural residents can better enjoy Internet services. After the hardware for digital economy development is completed, we should gradually upgrade the “software” needed for digital economy development, cultivate digital talents, and increase the introduction of rural talents. Each region should take the initiative to popularize digital economy-related knowledge and provide digital skills training for workers, so that more rural employed people can master digital economy skills. This will contribute to the development of the local digital economy while enabling farmers to obtain a more decent source of income. Relevant departments should develop talent policies that meet their own realities, introduce research and technical personnel suitable for local development, and grow the digital talent pool.

5.2. Improve the enthusiasm of entrepreneurship, the development of entrepreneurial support policies

Entrepreneurship is one of the ways to alleviate rural poverty in the digital economy, and increasing the entrepreneurial activity in the region can promote the income of rural residents. On the one hand, it is important to create an innovative and entrepreneurial atmosphere in the whole society, establish a sound incentive mechanism for entrepreneurship, and make full use of various media to publicize entrepreneurial support policies, so as to stimulate the passion of entrepreneurs, encourage the public to join entrepreneurial activities, and attract migrant workers to return to their hometowns to start their own businesses. Organize relevant institutions to carry out free entrepreneurial training and entrepreneurial policy consulting services, improve the protection of the rights and interests of entrepreneurial companies, so that business disputes and the maintenance of rights have the law to follow. For farmers who intend to start their own businesses, develop comprehensive entrepreneurial knowledge training and vocational skills training to help farmers improve their innovative and entrepreneurial abilities. On the other hand, governments at all levels should formulate corresponding entrepreneurship support policies according to the actual situation in the region, and implement preferential and subsidy policies for entrepreneurial enterprises, especially for farmer entrepreneurs, to crack the financial dilemma of entrepreneurs. Guaranteeing the normal development of entrepreneurial activities is conducive to promoting high-quality development of entrepreneurship in rural areas and even the whole region, and revitalizing rural industries and rural economy.

5.3. Promoting a fair social income distribution system

Economic growth increases the opportunities for the rural working population to participate in economic activities, raises the price of labor, and increases government tax revenues, thus increasing government transfer payments to the poor, all of which have a positive impact on rural poverty. However, while promoting rural economic development, we cannot ignore the fact that there is still a big gap between rural economic level and urban areas, so we should formulate corresponding policies to vigorously develop rural economy and promote the upgrading of rural industrial structure. While maintaining stable and healthy economic development, it is also necessary to focus on the issue of fair income distribution, achieve positive and inclusive growth, and prevent further widening of the income gap between residents. If the income gap continues to widen, the “Matthew effect” will emerge, resulting in wealth in the hands of the rich, which hinders the cause of rural poverty reduction. Reducing the income distribution gap, on the other hand, can gradually narrow the gap between income groups in various aspects, so that low-income earners can obtain higher marginal gains, which has a positive impact on poverty reduction. Therefore, one of the important measures to narrow the urban-rural gap and achieve integrated urban-rural development is to raise the income level of the bottom income earners, promote fair social development and move toward common prosperity. Relevant departments should develop a perfect distribution system to eliminate the phenomenon of illegal income and high income,

strengthen the financial inclination to the weak rural forces, and develop more preferential policies in medical care, education and social security.

5.4. Actively promote the urbanization process

The flow of surplus rural labor to cities is restricted by the “urban-rural dual economic structure” that has always existed in China, and the development of new urbanization has become an important tool to break the long-term division between urban and rural areas and promote the integrated development of urban and rural areas. With the new urbanization, the expropriation of agricultural land cannot be avoided, so it is necessary to improve the rural land management system, subsidize the expropriation of agricultural land, and protect the interests of farmers. In the process of urbanization of agricultural population, to protect the basic rights and interests of farmers, we should establish a sound and equitable social security system in urban and rural areas, let the transferred population enjoy the same medical and pension protection as urban residents, strengthen the training of employment skills for the transferred population and improve housing conditions. Urbanization has led to an influx of surplus rural workers into cities, but most of them are engaged in labor-intensive industries with low salaries. To break this situation, basic employment skills training should be provided to migrant workers to improve their employability. Since housing costs in towns are higher than in rural areas, and the wage level of migrant workers is at the lower-middle level in cities, in order to save expenses on housing, the housing pressure of migrant workers can be reduced by such means as cheap housing.

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