

Data Analysis of the Function Mechanism of Information Technology in Cultural Poverty Alleviation and Improvement of Rural Population Quality

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Abstract: Culture shows that it has multiple attributes such as economic, social and spiritual forms, which can better solve from the source the low cultural quality of the rural population and the inconsistency of spiritual concepts with the times, cutting off the worldwide and inter-generational transmission of poverty. However, because the generation and development of the Chinese culture itself has its characteristics of dynamics and changes, the influencing factors and action paths of cultural poverty alleviation are more complicated than other poverty alleviation methods. This paper analyzes the data analysis of the mechanism of cultural poverty alleviation and the improvement of rural population quality, uses information technology to construct the mechanism system of cultural poverty alleviation and the improvement of rural population quality, and then uses real data to simulate the system and simulate the experimental results. It is concluded that under the implementation of the cultural poverty alleviation strategy, the number of books for cultural professionals in rural areas has increased. Based on the 1,000 people in 2017, the number will increase by nearly 500 by 2020.

Keywords: Information Technology, Cultural Poverty Alleviation, Population Quality, Mechanism of Action

1. Introductions

Our country's agriculture, rural areas, and farmers are the "three rural" issues that affect and will affect the balanced and sustainable development of the national economy and society in the long term [1-2]. Among them, the issue of "people" is particularly important [3-4], whether human cultural quality and agriculture and rural areas can be modernized, whether urban and rural areas can develop harmoniously, whether agricultural surplus labor can be transferred [5-6], and whether agricultural productivity can be further improved. Whether the income and quality of life of the

rural population can be improved is related to whether they can adapt to the needs of economic globalization. Only by continuously improving the quality of the rural population is the key to solving these problems [7-8].

In the study of improving the quality of the rural population, some researchers believe that the purpose of the new generation of migrant workers entering the city to work is not only for survival, but also for development. They have a strong entrepreneurial spirit and a spirit of struggle, have their own ideas, and some even have a clear life plan. They are not only satisfied with making money to improve family life, but also satisfied with growth. They value personal abilities and strive to possess skills [9]. However, although the literacy level of the new generation of migrant workers is significantly higher than that of the traditional rural population, their average years of education are still far lower than the urban labor force. This gap is inconsistent with the process of rural urbanization [10]. With the upgrading of industries, cities no longer need less-literate labor, but the skills that many rural job seekers lack are far from market needs. In addition, various problems in today's society, such as the problem of wage arrears directly related to migrant workers, have stimulated their desire to learn, hoping to use more knowledge to change their own destiny [11]. Some researchers also pointed out that the level of education and professional skills lags behind the demand for labor in the urban labor market, which is very detrimental to their long-term stable employment in urban areas. This is a key issue. According to labor market news, the demand for a high school education accounts for the vast majority of the total labor market demand in the city, and the labor market demand for a high school education and below only accounts for a small part [12].

This paper studies the data analysis of the mechanism of information technology in cultural poverty alleviation and the improvement of the quality of the rural population. Firstly, it has a general understanding of the current situation of the quality of the rural population based on the literature and then proposes the necessity of cultural poverty alleviation. After that, information technology is used to construct the mechanism system of cultural poverty alleviation and the improvement of the quality of the rural population. Finally, simulation experiments are carried out on the constructed system, and relevant experimental results are obtained.

2. Research on Cultural Poverty Alleviation and the Quality Of Rural Population

2.1 The Present Condition of Rural Population Quality

(1) Low level of education

The education level of the rural population is still relatively low, which leads to the overall low level of education. Through the analysis of farmers' skills, 17.76% of the rural population has not yet mastered a certain agricultural production technology, and 48.57% of the rural population has not yet mastered a certain labor skill. The rural population lacks new technologies and new skills. Due to the short years of education, the rural population in my country has affected the acceptance and possession of new knowledge and directly affected the income of the rural population. They do not have

the necessary ability to learn new agricultural technologies. The gap with some developed countries is even greater.

(2) The rural population has a low degree of training

In agricultural production, people mainly rely on the principles and practices of their elders to obtain technology, and most people have not received formal and systematic agricultural technology education and training. According to the survey, less than one-third of the rural population have received scientific and technological training within a year, and the low coverage of scientific and technological training has resulted in a relatively low level of science and technology in the rural population. And the technical quality and cultural knowledge are relatively low. Migrant workers in the rural population have relatively high levels of education, some are about 8.3 years old. Although these rural populations are slightly more educated, they receive very little training in the job search process. Most people enter the city to engage in secondary and tertiary industries without training, and they also face many obstacles.

2.2 The Necessity of Cultural Poverty Alleviation

(1) Our country's rural traditional culture refers to the traditional culture developed under certain social and economic environment and conditions with the masses of Chinese farmers as the main body. It is also the gradual formation and accumulation of Chinese farmers in the long-term modern agricultural work practice. The deep overall framework of thoughts and understandings, thinking behaviors, values, emotional states, life mental attitudes, life pursuits, human lifestyles, etc, reflects the various spiritual worlds, personality characteristics and cultural levels of Chinese farmers. The local culture is closely related to the urban traditional culture. This is a culture created by the local rural residents as the main body, originated from the local countryside, attached to the local countryside, and has strong inheritance, regional and ethnic characteristics.

(2) Improving the quality of rural population is the significance of building a new socialist countryside

As an important part of the construction of a new socialist countryside, rural cultural construction is of great significance for further promoting rural economic development, improving farmers' living standards and quality of life, and improving farmers' overall quality. The construction of cultural soft power is interrelated with the construction of agricultural customs and culture. It can not only liberate farmers' minds, allow farmers to dare to try and innovate, and inject positive energy into rural economic development; it can also enhance the democratic conscience and rule of law of the majority of farmers. Correctly exercise their legal rights, protect their rights, properly solve various problems, and lay a solid foundation for agricultural policies; it can unite farmers, regulate farmers, and provide a good external environment for the construction of rural society; or change the peasants' concept of "personal interest first" and provide intellectual incentives for the development, prosperity and good ecology of agricultural production.

(3) Improving the level of rural culture is an objective requirement for the integration of urban and rural cultures

The construction of rural culture must be given more consideration in the integration of urban and rural culture. An urban-rural interconnection mechanism must be established, along with a relatively complete legal framework and a stable

investment mechanism. Additionally, the development of agricultural and rural cultural enterprises must be encouraged in order to close the cultural divide between urban and rural areas. Reduce the barriers to the spread and communication of culture in rural areas. The focus of the integration of urban and rural culture is to increase the construction of rural culture, promote the development of rural culture, build a scientific and reasonable public cultural service system, and ensure that farmers also enjoy various basic cultural rights. Vigorously develop the agricultural cultural industry, continue to meet the diverse cultural needs of farmers, deeply explore the benefits of rural cultural resources, learn to absorb outstanding foreign cultures, change rural cultural customs, and broaden cultural horizons. Through the construction of cultural soft power, the characteristic rural culture will be fully demonstrated, and the exchange and dissemination of rural culture and urban culture will be promoted.

3. System Design of the Mechanism of Cultural Poverty Alleviation and the Improvement of the Quality of the Rural Population

3.1 System Development

B/S architecture is used in the system's design and development. The browser, Web server, and database server comprise the three tiers of the browser/server system, sometimes known as the B/S (browser/server) structure. As the user's interface with the system, the browser is in charge of sending requests from the user and presenting the desired material. The web server is in charge of getting the user's requested data from the database and accepting the data that the database returns so that it may be sorted. The database server gives the programme the data it needs.

3.2 Overall System Architecture

The general framework of the mechanism system for reducing cultural poverty and raising the standard of living of the rural populace is suggested with reference to pertinent literature, as shown in Figure 1:

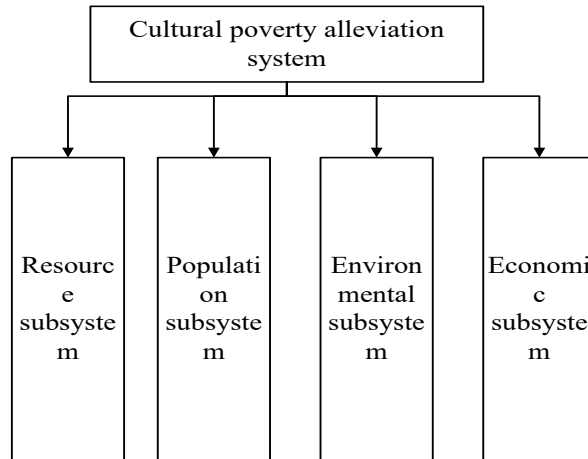


Fig.1 System overall architecture diagram

3.3 Resource Subsystem

This subsystem mainly chooses the authenticity of cultural resources as the key variable. Authenticity reflects the characteristics of cultural resources, which can retain local talents and attract foreigners. The two dimensions of "coming out" and "bringing in" embody internal attractiveness and external productivity. This subsystem mainly examines the influence path of the above-mentioned cultural resource quality on economic and social development. Cultural authenticity factors express the regional cultural identity and sense of belonging of local residents, and are positively related to economic development and poverty alleviation. That is, the recognition of local culture leads to an increase in the stock of regional human capital and the increase in the output value of cultural production activities, which is conducive to the development of the regional economy. With the increase in investment in fixed assets by the society, the level of public cultural services will be partially improved, forming a strong cultural atmosphere, and having a positive effect on the transformation of resources into economic potential.

3.4 Population Subsystem

This subsystem mainly examines the impact of education investment and social and cultural promotion on human capital. Investment in education has improved the quality of the population, the illiteracy rate has fallen, and the number of employed people has increased. The cultivation of regional cultural atmosphere and conceptual system has allowed residents to establish an awareness of proactive poverty alleviation. The number of participants in cultural poverty alleviation projects has increased, and the number and level of labor supply in the region have been correspondingly guaranteed.

3.5 Environmental Subsystem

The sustainable operation of the cultural poverty alleviation system and the realization of poverty reduction goals must start from making full use of cultural resources. Only by rationally developing and utilizing resources can the poverty alleviation work be

carried out smoothly. Investment in public cultural infrastructure can stimulate the economic potential of cultural resources, attract more enterprise groups to participate in poverty alleviation and development, increase the output value of typical cultural industries, and at the same time drive employment. Therefore, the economic benefits generated by cultural resources will increase overall GDP and encourage continued investment in infrastructure. At the same time, the characteristics of cultural resources have improved the quality of regional residents and laborers, and increased the human capital for regional development.

3.6 Economic Subsystem

The ultimate goal of cultural poverty alleviation is to improve the spiritual quality of the poor. However, in the actual business process, the increase of personal income and the overall development of the regional economy are important links for the coordinated development of culture to reverse the backward situation. Construct a cultural economic system, focusing on the changes brought about by cultural investment to regional GDP.

The main variables of cultural economic development are the increase in total per capita income and cultural consumption brought about by cultural production activities. There is a significant correlation between the two. With the smooth implementation of poverty alleviation work and the increase in the income level of the population, it will inevitably lead to consumption growth other than food. On the other hand, consumption promotes the development of higher industries, exerts a multiplier effect, and then promotes regional economic growth. The changes in the poor population in this process are reflected in the poverty rate, which provides a basis for determining government investment quotas.

3.7 Simulation Experiment

In order to examine the effect of improving the quality of the rural population under different cultural poverty alleviation strategies, this paper simulates four poverty alleviation strategies by adjusting the parameters of the model. Important adjustment variables in the system include cultural protection project investment, public cultural service facility investment, per capita GDP growth rate, characteristic cultural industry income, education project investment, and agricultural employment population.

4. Analysis of the Simulation Experiment Results of the Mechanism of Cultural Poverty Alleviation and the Improvement of Rural Population Quality

This study intends to simulate different strategies through different configurations, and then select the poor population, Gini coefficient, per capita net income and cultural expertise as the research variables. The above variables can measure the effectiveness of cultural poverty alleviation from many aspects, such as: achieving key poverty reduction goals, income and distribution status, and whether there are continuous funds and manpower to support the sustainable development of cultural poverty alleviation. The relevant data results of cultural professionals are shown in Table 1:

Table 1. Simulation Experiment Results

	Strategy 1	Strategy 2	Strategy 3	Strategy 4
2017	1000	1000	1000	1000
2018	1100	1158	1343	1254
2019	1200	1234	1435	1367
2020	1300	1346	1568	1489

It can be seen from Figure 2 that in the case of strategy 3, the increase in the number of cultural professionals is the highest, with a total increase of nearly 600 people. Since the cultural poverty alleviation has just begun in recent years, the number of people has increased slowly.

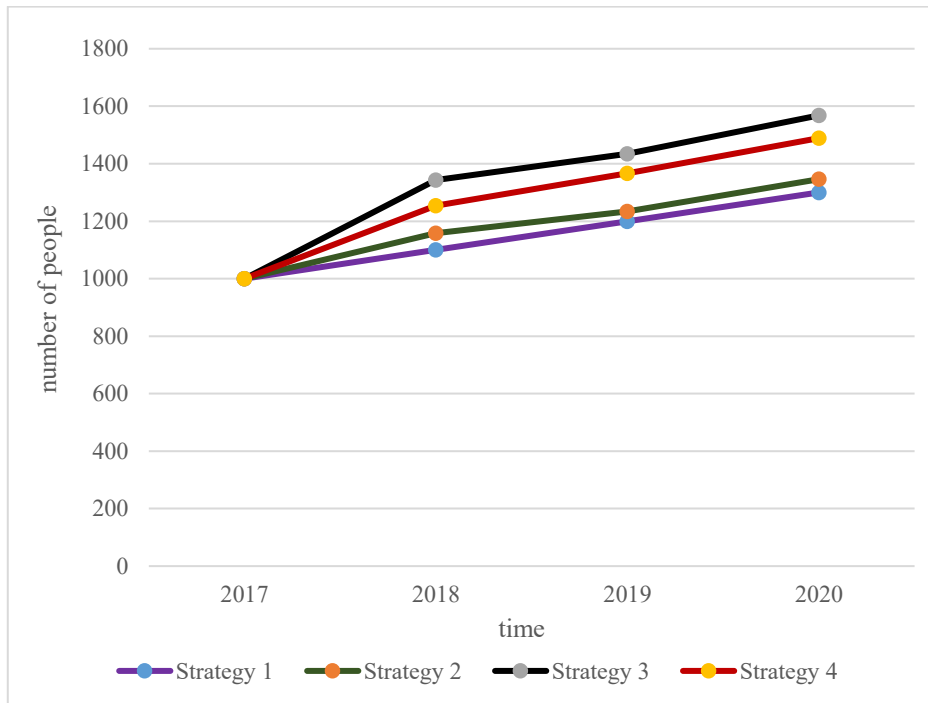


Fig.2 Simulation experiment result

5. Conclusions

Data collection for this article revealed that, as a result of the slow progress of cultural poverty alleviation, research on the mechanism of cultural poverty alleviation and the enhancement of rural population quality is still in its early stages. The relevant research results are also not entirely accurate, which leads to biased advantages in the conclusions drawn during the writing process. However, because of their lack of

experience, they might not be very thorough or might present a largely one-sided viewpoint. I'll keep researching relevant topics for my job and studies in the future.

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