Research on Risk Assessment Model of Rural Economic Development Based on Artificial Intelligence

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Abstract. It is an important mission of the Party to improve the poor and backward face of rural areas and reduce the number of poor people. At present, the "13th Five-Year Plan" has come to a successful conclusion, and the "14th Five-Year Plan" has been fully drawn up. My country has taken many measures to improve the appearance of poor and backward areas, and under the correct leadership of the Communist Party of China, remarkable results have been achieved. In the stage of decisive victory in poverty alleviation, decisive victory in the stage of building a moderately prosperous society in an all-round way, and building a modern socialist country in an all-round way, it is even more necessary to effectively link poverty alleviation and rural revitalization. At the same time, the rural party branch is the foundation and guarantee for guiding rural work, and plays an important role in the development and revitalization of the rural economy under the correct leadership of the party. This research adopts methods such as literature review, establishes a quantitative economic risk assessment model in the research, and conducts economic risk assessment effectively.

Keywords: poverty · rural revitalization · economic risk · evaluation

1 Introduction

Poverty is an important problem that every country has to solve at different times. Poverty is not only closely related to people's living standards, but also has a great relationship with the country's economic development level and overall social progress. Long-term progress. Poverty is a combination of political and economic issues, which means that poverty is both a political and an economic task. Under the correct guidance of the Communist Party of China's poverty alleviation thought, and the efforts of poverty alleviation cadres in poverty-stricken areas, my country's poverty alleviation work has achieved remarkable results [1, 2]. The reason why poverty alleviation work can achieve such good results is closely related to the correct leadership of the Chinese Communist Party.

The idea of poverty alleviation of the Communist Party of China has been deepened with the progress of the times. At different historical stages, the Communist Party of China has a poverty alleviation strategy that is in line with the atmosphere of the times. The second generation of the party's collective leadership with Deng Xiaoping at its core mainly emphasized the development of social productive forces, put forward the concept of a socialist market economy, and implemented the policy of reforming the rural economic system, making use of the progress of social productive forces to achieve common prosperity and improve poverty [3, 4]. The third generation of the party's leading collective with Jiang Zemin as the core put forward the important poverty alleviation strategic thought of "Three Represents", and deeply analyzed the importance of poverty alleviation according to the needs of building a well-off society in an all-round way, and focused on the analysis of the impact of poverty eradication on economic development and construction. The importance of a well-off society [5, 6]. The leading collective of the CPC Central Committee with Hu Jintao as the core continued to put poverty alleviation work in a prominent position in the national development strategy, put forward the concept of "scientific development concept", and integrated the "scientific development concept" into poverty alleviation work, in the process of poverty alleviation, Establish the concept of a scientific outlook on development, comprehensively solve the problem of living security in poor areas, build a new socialist modernized countryside, and take a new path of sustainable development. After the 18th National Congress of the Communist Party of China, my country has successfully entered the decisive stage of building a moderately prosperous society in an all-round way, but poverty is still an important factor hindering my country's rapid development. The actual characteristics of the region, comprehensive consideration of special circumstances, and implementation of different poverty alleviation strategies in different poverty-stricken areas, General Secretary Xi Jinping deeply recognized that poverty alleviation is an urgent and important project, and only by taking targeted measures can it be achieved quickly. Substantial progress in poverty alleviation [7, 8]. The 19th National Congress of the Communist Party of China put forward the idea of winning a well-off society in an all-round way and fighting against targeted poverty alleviation, aiming to increase the substantial effect of poverty alleviation, promote the rapid and long-term economic development of poverty-stricken areas, and reduce the number of poor people, and gradually formed a sound socialist poverty alleviation theory with Chinese characteristics. System.

With the pace of reform and opening up, generations of leaders of the party have carried out continuous and in-depth research on poverty issues in different periods, clarifying the strategic position and main measures of poverty alleviation in each period, enriching and innovating the ideological system of poverty alleviation and innovation. Connotation. Therefore, my country's poverty alleviation ideas are in the same line and keep pace with the times, and constantly adjust the focus of poverty alleviation according to the different needs of a specific period [9]. At the same time, while improving the poor face of backward areas, it also promotes the soft power of education, science and technology, and culture in poor areas. Revitalization. my country's poverty alleviation strategy, while advancing with the times and scientifically judging the current economic situation, comprehensively considers various factors to formulate a scientific and reasonable poverty alleviation strategy [10, 11]. It can be seen from this that giving full play

to the party's leadership in the process of poverty alleviation can provide solid support for poverty alleviation and gradually open up a poverty alleviation path with socialism with Chinese characteristics.

Our country has now achieved the overall social development goal of building a moderately prosperous society in an all-round way as scheduled. In the first year of the "14th Five-Year Plan", our country is striving to build a modern socialist country in an all-round way and achieve the ultimate goal of common prosperity. The Communist Party of China continues to regard poverty alleviation as a major political task. From winning the battle against poverty to realizing the transformation of rural revitalization, it is not only the goal of poverty alleviation, but also a major mission entrusted to the party by history.

2   Risk Assessment Model

Taking poverty alleviation and revitalization as the overall evaluation goal, the evaluation is divided into target layer, criterion layer and index layer. Combined with the content of the questionnaire survey and the results of the exchange and interview, the specific content of the indicator system was established, including economic income, education management, medical level, and education security.

Using the method of matrix judgment, a pair of matrices are constructed, and the indicators are divided into i and j, and the matrix scale is shown in Table 1.

According to the understanding of practical research, the evaluation of poverty alleviation and revitalization goals is divided into four aspects: economic income, education management, medical level and social security, and these four aspects are set as the standard level. They are represented by A, B, C, and D respectively, A represents economic income, B represents education management, C represents medical level, and D represents social security. It can be seen that the judgment matrix (A) is:

$$A = \begin{bmatrix} 1 & 4 & 3 & 7 \\ 1/4 & 1 & 1/2 & 5 \\ 1/3 & 2 & 1 & 6 \\ 1/7 & 1/5 & 1/6 & 1 \end{bmatrix}$$

Table 1. Matrix scale table

Callout	Notes
1	The importance of index i and index j is the same
3	Index i is more important than index j
5	Metric i is more important than metric j
7	Metric i is more important than metric j
9	The index i is the most important and the strongest than the index j
2, 4, 6, 8	respectively represent the median value between adjacent standards
reciprocal	j index is more important than i

Normalize the column:

$$\overline{a_{ij}} = \frac{a_{ij}}{\sum\limits_{i=1}^{n} a_{ij}}$$

Average the rows:

$$w_i = \sum_{i=1}^{n} \overline{a_{ij}} \quad \overline{w_i} = \frac{w_i}{\sum\limits_{i=1}^{n} w_i}$$

$$\approx \begin{bmatrix} 0.579 & 0.556 & 0.643 & 0.368 \\ 0.145 & 0.139 & 0.107 & 0.263 \\ 0.193 & 0.278 & 0.214 & 0.316 \\ 0.083 & 0.028 & 0.036 & 0.053 \end{bmatrix}$$

$$\overline{w_i} = \begin{bmatrix} 0.536 \\ 0.164 \\ 0.250 \\ 0.049 \end{bmatrix}$$

According to the formula $\lambda_{\max} = \sum\limits_{i=1}^{n} \frac{[A\overline{W_{ij}}]}{n(\overline{W_{ii}})}$. The maximum characteristic root that can be obtained is:

$$[A\overline{W_{ij}}] = \begin{bmatrix} 1 & 4 & 3 & 7 \\ 1/4 & 1 & 1/2 & 5 \\ 1/3 & 2 & 1 & 6 \\ 1/7 & 1/5 & 1/6 & 1 \end{bmatrix} \begin{bmatrix} 0.54 \\ 0.16 \\ 0.25 \\ 0.05 \end{bmatrix} = \begin{bmatrix} 2.280 \\ 0.670 \\ 1.049 \\ 0.201 \end{bmatrix}$$

$$\lambda_{\max} = \frac{1}{4}\left[\frac{2.280}{0.54} + \frac{0.670}{0.16} + \frac{1.049}{0.25} + \frac{0.201}{0.05}\right] = 4.1579$$

The consistency check results are:

$$CI = \frac{\lambda_{\max} - n}{n - 1} = \frac{4.1579 - 4}{3} = 0.0526$$

To sum up, in the case of n = 4, RI = 0.9

$$\frac{CI}{RI} = \frac{0.0526}{0.9} = 0.0584$$

Since the result of CI/RI is 0.0584 < 0.1, the construction of the current judgment matrix is correct.

3 Development Proposals

First of all, ideology determines the characteristics of people's behavior. If the attitude of villagers cannot be corrected ideologically, and only relying on traditional economic sources such as agriculture and planting, it will not be possible to improve their skills, nor can they quickly realize the ability to get rid of poverty and become rich. Similarly, it is difficult to get rid of poverty just by relying on the help of external forces such as policies, and it is very likely to lead to a situation from poverty alleviation to return to poverty. In terms of promoting economic development, grass-roots party organizations should put "wisdom support" in an important position in poverty alleviation and revitalization, use high-tech technological means, introduce emerging economic means, and use high-tech to drive rapid economic development, so as to achieve twice the result with half the effort.

Secondly, in the process of "supporting wisdom", highlight the importance of labor skills, continuously organize training in industrial development skills, animal husbandry skills and experience in getting rich, enhance the ability of villagers to get rich, and increase labor employment for particularly poor families. Training intensity, offering night school training courses for particularly poor families, insisting on organizing villagers to focus on learning new technical means every day, inviting professional technicians to conduct training on characteristic planting and breeding techniques, fully providing technical support, and actively encouraging villagers to take the initiative to learn new techniques. Technology, and encourage villagers to use new means to get rid of the appearance of economic backwardness in today's society with the development of information technology. Grass-roots party organizations should give priority to poverty alleviation through science and technology. They can carry out the three-to-the-countryside activities of science and technology, and distribute manuals and books related to benefiting farmers, so that villagers can use their spare time to learn scientific and cultural knowledge, improve villagers' scientific literacy, and train samples. The active learning attitude of the villagers enhances the technical ability of the villagers and releases the productivity.

Finally, while driving the villagers to "help their wisdom", Party members and cadres should also enhance their enthusiasm, initiative and creativity in poverty alleviation, and strive to create a group of models of poverty alleviation and prosperity, and use the first-developing villagers to drive the backward villagers to form a situation of assistance, laying a good foundation for rural revitalization. Party members and cadres can publicize the typical example of getting rich, stimulate the villagers' will to get rid of poverty, innovate the carrier of getting rich, actively explore the method of "party building + targeted poverty alleviation + rural revitalization", and use the testimonies of party building to build a demonstration base for rural entrepreneurship, and closely focus on the villagers' needs. To meet the needs of daily life, guide villagers to participate in poverty alleviation, take the initiative to get rid of poverty, and achieve rapid rural revitalization.

4   Conclusion

This research establishes an economic risk assessment model for poverty alleviation and rural revitalization, and establishes a quantitative economic risk assessment model in the research, which effectively conducts economic risk assessment.

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