

Coupling Coordination Evaluation of Basic Public Services and Rural Revitalization

—The Case of Three Ethnic Areas in Sichuan Province

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Abstract

The effective supply of basic public services is an important support for promoting rural revitalization, while the quality of rural revitalization is also the endogenous driving force of public services. The two form a coupled and coordinated system in terms of innovation, coordination, green, openness and sharing, and the results of the study show that in recent years, the two systems of basic public services and rural revitalization in the ethnic areas of Sichuan Province have a coupled and coordinated impact, but the regional gap is more obvious. From the evaluation index, public services in Liangshan Prefecture lag behind rural revitalization most of the time, while the opposite is true for Ganzi Prefecture and Aba Prefecture. From the coupling coordination degree, Liangshan Prefecture coupling coordination degree change time lags behind the implementation time of national policies. Strengthening investment in education and health care in Liangshan Prefecture, strengthening agricultural science and technology capacity in Ganzi and Aba Prefectures, and continuing to increase financial security will help the "coordinated effectiveness" of rural revitalization and public services.

Keywords

Ethnic areas, public services, rural revitalization, coupled coordination.

1. Introduction

The effective supply of basic public services is an important support for the promotion of rural revitalization, while the quality of rural revitalization is also an endogenous driving force for public services. For ethnic areas, the supply of public services is an even greater challenge. Raising the level of education, social security and improving the health and sanitation system in remote mountainous areas requires a greater price than in normal areas. In the process of rural revitalization, the single main body of supply of basic public services in ethnic areas and the unbalanced structure of supply and demand still constrain rural modernization. How to achieve effective coordination between the two systems and realize positive feedback and cyclical upward mobility between them has become a difficult problem that urgently needs to be solved.

2. Literature review

In recent years, the academic community's research results on basic public services have been relatively rich, mainly from the following three aspects. First, research on the supply of basic public services. The supply of basic public services should be shifted from a one-dimensional body to a pluralistic and three-dimensional supply, beyond the synergistic inertia^[1], and the use of big data to drive the supply vector. The second is research on the equalization of basic public services. Some scholars have conducted horizontal and dynamic measurements of the level of basic public service provision in China^[2], and found that regions show a decreasing

trend from east to west, and digital governance should be promoted^[3] and the rural revitalization strategy should be promoted^[4] in order to achieve better articulation of public services. Third, research on the coupling and coordination of basic public services. Yin Peng.^[5], Ma Huiqiang^[6], and Zeng Fanrong^[7] combine basic public services with urbanization, Liu Chuanming^[8], Xu Changge^[9], and Li Qiong^[10] explore the relationship between basic public services and economic development.

As the rural revitalization strategy continues to deepen, research on rural revitalization has been carried out in three main areas. The first is research on the connotation of rural revitalization. Scholars have interpreted the connotation of rural revitalization from different perspectives, such as urban-rural integration, common prosperity^[11], and positioning of rural values^[12]. The second is the study on the measurement of indicators of rural revitalization. According to the five strategic objectives of rural revitalization, Zhang Ting^[13] and Jia Jin^[14] have constructed different indicator evaluation systems. Thirdly, rural revitalization is combined with different themes, such as coupling and coordinating analysis with rural tourism^[15], new urbanization^[16], digital economy^[17] and so on.

Although the related literatures have all carried out rich studies on both, there are fewer studies on their mutual influence. In terms of the coupling mechanism, rural revitalization is essentially a matter of allocating human resources, while basic public services are an important component of interests, and promoting the equalization of basic public services can help to promote the goal of rural revitalization^[18]. In terms of related scales, studies have been conducted at the provincial level^[19] and Tibetan areas in four provinces^[20].

Through combing the existing literature, it is found that there are fewer studies on the relationship between the two, and even fewer for ethnic regions. Based on this, this paper takes Aba Tibetan and Qiang Autonomous Prefecture (hereinafter referred to as Aba Prefecture), Ganzi Tibetan Autonomous Prefecture (hereinafter referred to as Ganzi Prefecture), and Liangshan Yi Autonomous Prefecture (hereinafter referred to as Liangshan Prefecture) in Sichuan Province as the study area, and applies the Coupling Coordination Model to analyze the coupling and coordination relationship between the public service system and the rural revitalization system quantitatively, in order to provide theoretical reference for coordinated development.

3. Coordination mechanism for coupling basic public services and rural revitalization

The new development concept is a guide to action and a basic guideline for China's development, providing a value orientation for rural revitalization and basic public services.

On the one hand, from the perspective of innovation, rural revitalization provides more economic support for basic public services by promoting the transformation of the rural economy and new development modes such as smart agriculture and rural tourism. From the perspective of coordination, rural revitalization promotes the equalization of basic public services by coordinating urban and rural development and narrowing the gap between urban and rural areas. From a green perspective, rural revitalization provides more ecological resources for basic public services by promoting the development of green agriculture and ecological agriculture. From the perspective of openness, rural revitalization attracts more external resource support for basic public services through an open development environment and market system. From the perspective of sharing, rural revitalization brings comprehensive and sustainable development to basic public services by ensuring that the rural population receives tangible benefits.

On the other hand, from the perspective of innovation, basic public services can enhance the quality and efficiency of services, better meet the needs of rural residents and accelerate the

degree of realization of rural revitalization. From the perspective of coordination, basic public services ensure that urban and rural residents can enjoy equalized services in education, medical care and social security through the balanced allocation of resources, promoting the steady advancement of rural revitalization. From a green perspective, basic public services provide a sustainable development environment for rural revitalization by reducing the impact on the environment and protecting the ecological environment. From the perspective of openness, basic public services improve the quality of rural revitalization by enhancing the breadth of service targets and the flexibility of service modes to meet the diversified needs of different groups. From the point of view of sharing, basic public services enhance the capacity of rural social governance by improving the supply system, helping to achieve common prosperity in rural revitalization.

Whether it is upgrading the basic public service system or implementing the rural revitalization strategy, the aim is to achieve high-quality development in the countryside, further narrow the gap between urban and rural areas, enhance farmers' sense of access and well-being, and achieve common prosperity. Therefore, the two systems, basic public services and rural revitalization, do not have a single linear relationship with each other, but develop in harmony with each other.

4. Modeling, indicator selection and data sources

4.1. Construction of an indicator system and determination of indicator weights.

Based on the understanding of the main development indicators of basic public services, taking the "13th Five-Year" National List of Basic Public Services as a reference, and taking into account the actual situation of supply and demand of public services in ethnic areas of Sichuan Province and the limitations of data access, and based on the principles of scientific, systematic, comparability and data accessibility, we will construct a system of basic public services indicators (Table 1). indicator system (Table 1). Meanwhile, an evaluation system of rural revitalization indicators is constructed based on the five strategies of rural revitalization and existing evaluation systems (Table 2).

Table 1 Measurement index system of basic public service index for ethnic areas in Sichuan Province

Primary index	Secondary index	Three-level index	Weight and property
Basic public service	Basic public education	Pupil-teacher ratio	0.1172-
		High school students-teacher ratio	0.0829+
	Basic health care	Number of health institutions per 10,000 people	0.0942+
		Number of beds in health institutions per 10,000 people	0.0892+
		Number of health technicians per 10,000 people	0.1036+
	Basic public culture	Number of cultural institutions per 10,000 people	0.2081+
		Broadcast comprehensive population coverage	0.0579+
		Television comprehensive population coverage	0.0445+
	Basic social security	Participation rate of medical insurance for urban and rural residents	0.1517+
		Old-age insurance participation rate for urban and rural residents	0.0507+

Table 2 Index system for measuring rural revitalization index in ethnic areas of Sichuan Province

Primary index	Secondary index	Three-level index	Weight and property
Rural revitalization	Prosperous industry	Total power of agricultural machinery per capita	0.0307+
		Overall grain production capacity	0.0298+
		Agricultural labor productivity	0.0445+
		Main business income of agricultural product processing enterprises above designated size	0.0318+
		Application amount of pesticide and chemical fertilizer	0.0294-
		Comprehensive utilization rate of livestock and poultry manure	0.0285-
	Ecological habitability	The proportion of administrative villages that treated domestic sewage	0.0242+
		The proportion of administrative villages dealing with domestic waste	0.0294+
		Access to sanitary toilets	0.0308+
		Rural greening rate	0.0411+
	Rural culture	The proportion of expenditure on education, culture and entertainment of rural residents	0.0284+
		Proportion of full-time teachers in rural compulsory education schools with bachelor's degree or above	0.0302+
		Average years of schooling for rural residents	0.0305+
		Cable coverage	0.0279+
		Proportion of administrative villages with Internet broadband service	0.0302+
		Number of rural cultural stations	0.0376+

Table 2 (continued) Index system for measuring rural revitalization index in ethnic areas of Sichuan Province

Rural revitalization	Effective governance	Village director, secretary "shoulder to shoulder" ratio	0.0328+
		The proportion of administrative villages that have formulated village plans	0.0321+
		The proportion of administrative villages that have carried out village renovation	0.0432+
	Be well off	Per capita net income of farmers	0.0418+
		Growth rate of per capita income of farmers	0.0227+
		Urban-rural income ratio	0.0367+
		Incidence of rural poverty	0.0325-
		Engel coefficient of rural residents	0.0358-
		Car ownership per 100 households	0.0356+
		Per capita housing area of rural residents	0.0313+
		Access to safe drinking water	0.0260+
		Village road hardening rate	0.0489+
		Per capita road area	0.0356+
		Number of health technicians per 1,000 rural population	0.0397+

This paper selects relevant data referring to Aba, Ganzi and Liangshan Prefectures from 2010 to 2022, and the raw data of the indicators involved come from the Sichuan Statistical Yearbook, Aba Statistical Yearbook, Ganzi Statistical Yearbook, Liangshan Statistical Yearbook, and the statistical bulletin of national economic and social development of each state in previous years. The interpolation method was used to fill in the gaps for missing data, and the entropy method was used to determine the weights of each indicator (Tables 1 and 2).

The weights of the indicators of basic public services and rural revitalization are determined through the objective entropy value method, and the evaluation indexes of the two systems are obtained. The specific steps are as follows:

Data standardization:

Positive indicators:

$$Z_{aij} = \frac{X_{aij} - X_{\min}}{X_{\max} - X_{\min}} \quad (1)$$

Negative indicators:

$$Z_{aij} = \frac{X_{\max} - X_{aij}}{X_{\max} - X_{\min}} \quad (2)$$

In the formula, and represent the maximum and minimum values of the index, respectively; and are the values after standardization.

Indicator normalization:

$$P_{aij} = \frac{Z_{aij}}{\sum_{\alpha=1}^m \sum_{i=1}^k Z_{aij}} \quad (3)$$

Calculate the entropy value:

$$E_j = -k_1 \sum_{\alpha=1}^m \sum_{i=1}^k P_{aij} \ln(P_{aij} + 0.0001) \quad (4)$$

$$\text{which is } k_1 = \frac{1}{\ln(m \times k)}.$$

Calculate the redundancy of the indicators:

$$D_j = 1 - E_j \quad (5)$$

Calculate the weights of the indicators:

$$W_j = \frac{D_j}{\sum_{j=1}^n D_j} \quad (6)$$

Obtain a composite evaluation index for each region:

$$U_{aij} = \sum_{j=1}^n (P_{aij} \times W_j) \quad (7)$$

4.2. Coupled harmonization model.

The coupling coordination degree model is used to analyze the development level of coupling coordination between things, including the calculation of coupling degree (C), coordination index (T) and coupling coordination degree (D). The comprehensive evaluation index of the two systems is defined as U1 and U2, respectively:

$$C = 2 \sqrt{\frac{U_1 \times U_2}{(U_1 + U_2)^2}} \quad (8)$$

$$T = \alpha U_1 + \beta U_2 \quad (9)$$

$$D = \sqrt{C \times T}$$

(10)

Where C is the degree of coupling; T is the integrated coordination index of the two systems, reflecting the level of coordinated development between the two subsystems; D is the degree of coupling coordination; α and β are coefficients to be determined to reflect the degree of the role of the basic public services and rural revitalization in the integrated system, $\alpha + \beta = 1$, and in this paper, we will take the value of both α and β as 0.5.

Based on the above calculations, the combined evaluation indices for U1 and U2 were obtained (Table 3).

Table 3 Comprehensive Evaluation Index of Public Services (U1) and Rural Revitalization (U2) in Ethnic Areas of Sichuan Province

District Year	Aba Prefecture		Ganzi Prefecture		Liangshan Prefecture	
	U1	U2	U1	U2	U1	U2
2010	0.3526	0.1347	0.3509	0.1567	0.1543	0.1459
2011	0.4544	0.1823	0.3705	0.2826	0.1839	0.2959
2012	0.4850	0.2199	0.4004	0.4217	0.2054	0.4542
2013	0.5021	0.2762	0.4767	0.2281	0.2585	0.3051
2014	0.5182	0.4729	0.5501	0.4270	0.2758	0.2594
2015	0.5167	0.3307	0.5542	0.4540	0.3196	0.4261
2016	0.5314	0.5652	0.5471	0.3174	0.2810	0.6125
2017	0.5593	0.6567	0.5814	0.4925	0.3094	0.5651
2018	0.5574	0.7497	0.5849	0.4736	0.3960	0.3388
2019	0.5683	0.6830	0.5930	0.6135	0.4053	0.6296
2020	0.7027	0.5713	0.6687	0.7030	0.4940	0.5725
2021	0.7178	0.8288	0.6936	0.8271	0.4653	0.6782
2022	0.7871	0.7082	0.7354	0.4899	0.4545	0.7274

Further with the help of the coupling coordination model to calculate the degree of coupling (C) and the comprehensive coordination index (T) of the two development systems of basic public services and rural revitalization, and finally calculate the degree of coupling coordination (D) (Fig. 1) and compare it with the stage division of the degree of coupling coordination (Table 4).

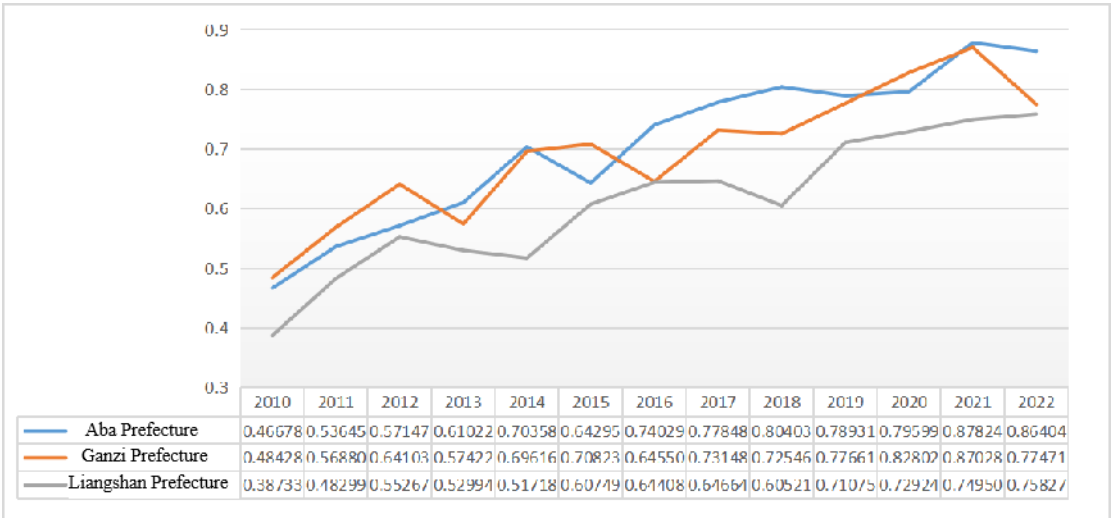


Fig. 1 Dynamic changes in the degree of coordination of the coupling of public services and rural revitalization systems in ethnic areas of Sichuan Province

Table 4 Coupling Coordination Degree Stage Classification

Serial number	Coupling coordination degree (D)	U1>U2	U1<U2
0.0≤D<0.1	extreme disorder		
0.1≤D<0.2	severe disorder		
0.2≤D<0.3	moderate disorder		
0.3≤D<0.4	Mild disorder		
0.4≤D<0.5	borderline disorder	Lagging rural revitalization	Lagging basic public services
0.5≤D<0.6	Primary coordination		
0.6≤D<0.7	mild coordination		
0.7≤D<0.8	moderate coordination		
0.8≤D<0.9	good coordination		
0.9≤D<1.0	high degree of coordination		

5. Empirical analysis

5.1. Comprehensive evaluation index analysis of basic public services and rural revitalization.

The entropy method was applied to calculate the comprehensive evaluation indexes of basic public services (U1) and rural revitalization (U2) in Aba, Ganzi, and Liangshan Prefectures (Table 3), and to obtain the levels of the comprehensive indexes of public services and rural revitalization in each state from 2010 to 2022 (Fig. 2, Fig. 3, Fig. 4). In general, there is an increasing trend in all three regions. In terms of increase, as far as the basic public service composite index is concerned, the three regions show an increasing trend year by year, with Aba Prefecture increasing from 0.3526 to 0.7871, Ganzi Prefecture increasing from 0.3509 to 0.8288 and then decreasing to 0.7354, and Liangshan Prefecture increasing from 0.1543 to 0.4940 and then decreasing to 0.4545. In addition, the increase in the U1 of the three regions is higher than that of the U2. Aba Prefecture has a higher U1 than U2 in 2010-2016, Ganzi Prefecture has a higher U1 than U2 in 2010-2019, while Liangshan Prefecture's U1 is lower than U2 for most of the time in 2010-2022. The reasons for this are: firstly, Liangshan Prefecture's overall economic strength is better than that of Aba Prefecture and Ganzi Prefecture, with a total annual GDP 4-5 times higher than that of the latter two prefectures; and secondly, the resident populations of Aba and Ganzi Prefectures are significantly smaller than that of Liangshan Prefecture and, under the same conditions, investing equal funds, the equalization of their urban and rural basic public services is conducive to the emergence of results; thirdly, since 2011, the Tibetan region has launched three major livelihood projects and invested large amounts of funds in public service construction. Since October 18, 2017, when the Party's 19th National Congress report first put forward the rural revitalization strategy, the comprehensive evaluation index of rural revitalization in the three prefectures area is at a high value, and there is a trend of growth. Starting from 2021, the comprehensive evaluation index of rural revitalization in Aba Prefecture and Ganzi Prefecture declines, lagging behind the development of public services, while the comprehensive evaluation index of rural revitalization in Liangshan Prefecture gradually rises in 2020, which is due to the following reasons: first, Aba Prefecture and Ganzi Prefecture have reduced the resident population in recent years, and the talents are flowing outward; second, for the Tibetan area, the emphasis is on the step of seeking

progress in a stable manner, and the stability is before the development, and Liangshan Prefecture compared to it has higher requirements.

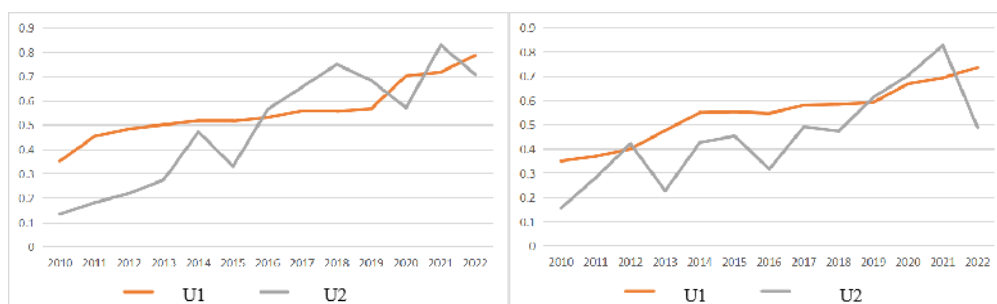


Fig. 2 U1 and U2 (Aba Prefecture)

Fig. 3 U1 and U2 (Ganzi Prefecture)

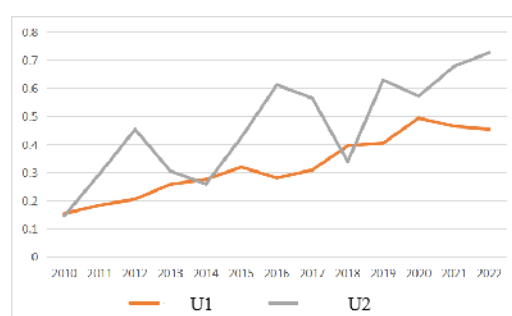


Fig. 4 U1 and U2 (Liangshan Prefecture)

5.2. Analysis of the degree of coupling and coordination between public services and rural revitalization.

According to Figure 2, in terms of temporal evolution, Aba Prefecture was in the marginal dislocation stage in 2010, a period in which Aba Prefecture had just completed post-disaster reconstruction after the 2008 earthquake, and public services and rural revitalization were not a priority, and entered the primary coordinated development stage in 2011-2012, the mild coordinated development stage in 2013 and 2015, and the moderate coordinated development stage in 2014 and 2016-2022 are above the moderate coordinated development stage; Ganzi Prefecture was in the marginal disorder stage in 2010, though it has been in the primary coordinated development coordination since 2011, and in the moderate coordinated development stage since 2017. Liangshan Prefecture entered the primary coordinated development stage since 2012, the mild coordinated development stage in 2015, and the moderate coordinated development stage in 2019. The timing of the change of the coupled coordinated development stage of the three prefectures is consistent with the "accelerated new rural assumptions" put forward in the "Twelfth Five-Year Plan" and the "high-quality development" and "moderate coordinated development" of the "Thirteenth Five-Year Plan". High-quality development" and "new urbanization" in the "13th Five-Year Plan", etc., but the coupled coordinated development of Liangshan Prefecture has significantly lagged behind the implementation of the national policy, which further indicates that the development of rural revitalization in Liangshan Prefecture has greater difficulties, and it is difficult to make rapid improvements in a short period of time. From the results, the two systems in the tri-state region after 2019 are in the coupling stage at a moderate level, with strong interactions between each other and coordinated development. If a secondary indicator of either system is leading or lagging behind, it may affect the level of coupling coordination.

6. Conclusions and recommendations

6.1. Stimulating Liangshan Prefecture as a model for well-coordinated development of public services and rural revitalization.

The coupling coordination degree of Liangshan Prefecture increases from 0.3873 in 2010 to 0.7583 in 2022, constantly showing an increasing trend and steadily moving towards the stage of good coordination. Aba and Ganzi Prefectures, due to their smaller populations and volumes, have higher coordinated development, compared to which Liangshan Prefecture is difficult to show a leaping situation and can only progress gradually. Specifically from the point of view of the various secondary indicators, Liangshan Prefecture should increase the investment in basic education, basic medical and health care financial resources. And focus on elementary school teacher input, the number of health institutions above, efforts to make up for the short board of public services, strengthen the system construction. It can also enhance the ecological livability and rural civilization construction of rural revitalization by providing sanitary toilet penetration rate, strengthening education and cultural recreation of urban and rural residents and the construction of cultural stations. Through their coupled and coordinated relationship, it will accelerate the implementation of the rural revitalization strategy and improve the supply capacity of basic public services by continuously investing all resources, so that it will become a model area for the coordinated development of ethnic areas in Sichuan Province. By taking the lead and demonstrating its role, it will provide a model of experience for other ethnic areas.

6.2. Guiding the development of public services in Aba and Ganzi prefectures in a stable and moderately coordinated manner with the revitalization of the countryside.

In contrast, the coupling coordination degree of Aba and Ganzi prefectures shows a trend of increasing and then decreasing. The main factor contributing to this phenomenon lies in the decline of the rural revitalization index. Specifically, its comprehensive grain production capacity, agricultural labor productivity, sewage and garbage treatment, and rural residents' education, culture and entertainment expenditures have declined, which, to a certain extent, explains the obvious trend of rural population exodus from the regions of Aba Prefecture and Ganzi Prefecture, resulting in an obvious weakening of rural revitalization momentum. It is therefore necessary to speed up the modernization of agriculture, improve scientific and technological innovation, reduce the trend of population outflows, and strengthen the "blood-forming" capacity of the countryside itself.

6.3. Promoting the development of the two systems of public service and rural revitalization at their own level.

For the strategy of rural revitalization. It should grasp the endogenous development capacity of the countryside, solve the problem of talent shortages in the countryside, establish a sound mechanism for the training of rural talents, cultivate new types of farmers capable of contributing to the revitalization of villages, attract talents from all walks of life, promote the integration of the three sectors of the economy in rural areas, pay attention to the construction of a spiritual culture in the countryside, and actively develop the eco-industry, in order to promote the revitalization of industries, talents, ecology, culture and organizations in all aspects. As for public services, on the one hand, government departments should increase financial support for public services, adjust the structure of the main body of public service supply, and incentivize social groups to participate in public service supply. On the other hand, the financial system should be improved, especially by promoting rural reforms focusing on basic public services in rural areas, so as to make the supply of basic public services efficient, manage them well and effectively, and improve the quality of public services.

6.4. Increasing fiscal expenditure on agriculture and rural areas to provide financial security for rural development.

Increasing fiscal expenditure in rural areas is conducive to directly increasing the quantity and improving the quality of public services in the village, enhancing the sense of well-being of rural residents, creating opportunities for rural industrial transformation, activating endogenous dynamics in the countryside through a variety of business models, and contributing to the coupled and coordinated development of the two.

References

- [1] Miao Hongpei. Cooperative Supply of Multi-Subjects:A Path of Supply-side Reform on Basic Public Services. *Journal of Shandong University(Philosophy and Social Sciences)*. (2019)No. 04, p. 31-39.
- [2] XIN Chongchong,Chen Zhiyong. Distribution Dynamics,Regional Differences and Convergence of Basic Public Service Supply Level in China. *The Journal of Quantitative & Technical Economics*. Vol. 36 (2019)No. 08, p. 52-71.
- [3] WANG Yulong,WANG Dianli. Demand Identification, Data Governance and Precision Supply - The Way to Reform the Supply Side of Basic Public Services. *Academic Forum*. Vol. 41 (2018)No. 02,p.147-154.
- [4] HU Zhi-ping. Public Service: New Exploration on Effective Linkage between the Consolidation of Achievements of Poverty Alleviation and Rural Revitalization. *Study & Exploration*. (2022)No. 03,p. 49-57.
- [5] YIN Peng, LI Chenggu, CHEN Cai, et al. Relationship between Population Urbanization and Basic Public Service in the Context of the New Urbanization—Take Jilin Province for Example. *Economic Geography*. Vol. 35 (2015)No. 01, p. 61-67.
- [6] MA Huiqiang,LIAN Qianwen,HAN Zenglin,et al. Spatio-Temporal Evolution of Coupling and Coordinated Development of Basic Public Services-Urbanization-Regional Economy. *Economic Geography*. Vol. 40 (2020)No. 05, p. 19-28.
- [7] ZENG Fan-rong,LI Ling-wei,HE Zheng-chu,et al. Research on the Dynamic Relationship Between Basic Public Service Level and New-type Urbanization. *China Soft Science*. (2019)No. 12,p. 150-160.
- [8] LIU Chuanming,ZHANG Chunmei,REN Qilong,et al. Coupling Mechanism and Spatiotemporal Evolution Between the Basic Public Services and the Economic Development: The Case of 13 Cities in Jiangsu Province. *Economic Geography*. Vol. 39 (2019)No. 04, p. 26-33.
- [9] Xu Changge,Jiang ShuoLiang. Constraints on Economic Growth Targets,Inter-governmental Competition and the Provision of Basic Public Services. *Journal of Guangdong University of Finance & Economics*. Vol.35 (2020)No. 06,p. 4-16.
- [10] LI Qiong,LI Songlin,BAI Xing,et al. Spatio-temporal characteristics of the coupling and coordination of Guangdong-Hong Kong-Macau Greater Bay Area's basic public services and economic development. *Progress in Geography*. Vol.41 (2022)No. 09,p. 1688-1701.
- [11] He Renwei. Urban-rural integration and rural revitalization:Theory, mechanism and implementation. *Geography Research*. Vol. 37 (2018)No. 11, p. 2127-2140.
- [12] LIU Peilin, QIAN Tao, HUANG Xianhai, et al. The Connotation, Realization Path and Measurement Method of Common Prosperity for All. *Journal of Management World*. Vol.37 (2021)No. 08, p. 117-129.
- [13] Zhang Jun. Village Value Orientation and Rural Revitalization. *China Rural Economy*. (2018)No. 01,p. 2-10.
- [14] ZHANG Ting,LI Minrong,XU Yanmei. The Construction and Empirical Study of Rural Revitalization Evaluation Index System. *Management World*. Vol. 34 (2018)No. 08, p. 99-105.
- [15] JIA Jin,LI Xuefeng,SHEN Yun. Indicator System Construction and Empirical Analysis for the Strategy of Rural Vitalization. *Finance & Economics*. (2018)No. 11, p. 70-82.

- [16] Li Zhilong. Research on the coupling mechanism and coordinated development of rural revitalization-rural tourism system:A case study on Fenghuang County in Hunan . Geography Research. Vol. 38 (2019)No. 03, p. 643-654.
- [17] XU Weixiang,LI Lu,ZHOU Jianping,et al. The dynamic evolution and its driving mechanism of coordination of rural rejuvenation and new urbanization. Journal of Natural Resources. Vol. 35(2020)No. 09, p. 2044-2062.
- [18] Zhang Wang,Bai Yongxiu. Theoretical Construction, Empirical Analysis and Optimization Path of the Coupling of Digital Economy and Rural Revitalization. China Soft Science. (2022)No. 01, p. 132-146.
- [19] Yang Yuangen. Study on the Equalization of Urban and Rural Basic Public Services and Rural Revitalization. Dongyue Tribune. Vol. 41 (2020)No. 03, p. 37-49.
- [20] HE Yujing,ZHANG Weiwei. Analysis on the Coupling and Coordinated Development of China's Provincial Rural Basic Public Services and Rural Revitalization and Its Influencing Factors: From the Perspective of Rural Multidimensional Relative Poverty . Chongqing Social Science. (2022)No. 08, p.48-68.
- [21] Lu Yangchun,Shi Mian. Spatial-temporal Differentiation Research of Coupling Coordination Degree Between Rural Revitalization and Public Services in Tibetan areas in four provinces. Journal of Ethnic Culture. Vol. 13 (2021)No. 04, p. 35-47+153-154.