

Investigation on the Impact of Rural Revitalization and Industrial Development in Non-Resource-Endowed Areas: A Case Study of Baiyintela Village

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Abstract: Based on the challenges encountered by non-resource-endowed rural areas, including high demand for agricultural and pastoral environmental resources, an ageing population structure, and dependence on a singular industrial sector, this study focuses on Baiyintela Village as a case study to examine the natural resources, human resources, and industrial development in the area. The objective is to identify the key constraints on industrial development in Baiyintela Village and conduct a systematic analysis of development opportunities and challenges based on market demand and the industrial structure of surrounding areas. The study proposes a model that relies on the “branch-enterprise-workshop-landmark industry-platform supply chain” as the foundation and employs the “consolidate-wall” model to address development challenges. Through leveraging online platforms and offline industries, integrated services such as marketing services and packaging design are provided to the government and individuals. By investigating the revitalization path and development of resource-constrained rural areas, this study aims to overcome the inherent limitations posed by scarce resources and other factors, formulating a solution that is both feasible and supported by scientific evidence, thus providing innovative insights for the revitalization of similar resource-limited rural areas.

Keywords: Handicraft Industry, Non-Resource-Endowed, Economic Development, Rural Revitalization

1. Introduction

Rural industrial revitalization is at the core of rural revitalization. This research adopts a problem-oriented approach and selects non-resource-endowed areas as the subject of investigation. The focus is on addressing the challenges and issues faced by resource-limited areas in terms of industry selection, establishment, and expansion, and fostering sustained endogenous dynamics for rural revitalization. The study aims to propose solutions, develop feasible and implementable measures, and facilitate the continuous and long-term development of the region, providing references and insights for other non-resource-endowed areas.

1.1. Overview of Relevant Research at Home and Abroad

In his book “Transforming Traditional Agriculture” published in 1964, Theodore Schultz, a renowned American economist and co-recipient of the 1979 Nobel Memorial Prize in Economic Sciences, proposed three ways to transform traditional agriculture. One of these ways is to invest in human capital for farmers. He suggested that investments in human capital for farmers should include education, on-the-job training, and improving health conditions. From the perspective of rural revitalization, developed countries have made significant efforts in rural development activities to narrow the urban-rural gap and increase farmers’ income. For example, the “New Village Movement” in South Korea, “New Village Construction” in Japan, and “Rural Area Development” in Germany can be categorized into three stages of the rural revitalization movement: the transformation of rural grassroots facilities, transition in rural development approaches, and shift in rural mindset and beliefs.

Most domestic scholars have focused on the main issues related to the transformation of rural resource endowment. Currently, the prominent issue is the resource endowment within rural areas, including low utilization of natural resources, lack of human resources, chaotic resource management, and difficulties in resource integration ^[1]. Rural resource development in China primarily focuses on five aspects: land resources, water resources, biological resources, labour resources, and cultural tourism resources.

Nonetheless, the utilization of these resources encounters various issues, including low efficiency, disorderly management, inadequate intellectual resources, diminished returns on resource investment, and a scarcity of high-quality resources [2]. To achieve a comprehensive and effective development path, it becomes imperative to reconfigure and utilize the interconnected yet dispersed resources, including both internal and external resources of the rural areas. [3]

Many domestic scholars have conducted research on the connection between rural revitalization and the consolidation and expansion of achievements in poverty alleviation. Tu Shengwei (2020) pointed out that achieving the transition from poverty alleviation to industrial prosperity requires promoting the continuous development of poverty alleviation industries, transforming the development model that relies on external support into its own advantages, and achieving sustainable industrial development through endogenous power [4]. Zhu Haibo and Nie Fengying (2020) conducted research on industrial development in deeply impoverished areas and emphasize that factors such as local resources, manpower, capital, and entrepreneurial talent should be considered. They suggest combining government and market forces, nurturing and developing industries with competitive advantages, and establishing a multi-stakeholder industrial distribution mechanism [5]. Wan Junyi and Zeng Lijun (2018) suggest that it is necessary to establish a modern agricultural industry system that adapts to the domestic and international socio-economic development levels, with modern agriculture as the main component. Efforts should be made to promote models of intensive agricultural development, improve agricultural labor productivity, and increase land productivity [6].

In conclusion, concerning the relationship between resource endowment and economic development, domestic research has mainly focused on exploring the economic value of existing industrial resources. Additionally, regarding the effective connection between consolidating poverty alleviation and rural revitalization, both aspects have provided valuable references and insights for this study.

1.2. Research Contents and Objectives

This research begins with an investigation focusing on Baiyintela Village, which is a poverty-stricken rural area characterized by limited transportation, scarce water resources, and a labour force shortage, all of which pose significant challenges to its development. The study comprehensively surveys the status of natural resources, human resources, and other resources in the village. It conducts in-depth research on the village's industrial development, with a particular emphasis on identifying the main factors restricting industrial growth in Baiyintela. Furthermore, the research analyzes development opportunities and challenges based on market demands and the industrial structure of surrounding regions. The main objective of this research is to explore the path of rural revitalization in non-resource-endowed areas by conducting surveys and studies. The aim is to find sustainable and viable solutions for rural development in such areas, overcoming the limitations posed by inherent conditions such as limited resources.

1.3. Theoretical Basis

The theoretical basis for this investigation is rooted in the following principles: prioritizing the development of agriculture and rural areas, promoting integrated urban-rural development, and facilitating urban-rural exchanges. It emphasizes the construction of a strong agricultural country and the solid promotion of rural revitalization across industries, talents, culture, ecology, and organizations.

The approach also emphasizes the consolidation and expansion of achievements in poverty alleviation, enhancing the endogenous development motivation of impoverished areas and populations. Increasing the income of the impoverished population is regarded as a fundamental requirement, with a focus on accelerating the development of poverty-stricken counties, fostering motivations and improving intellectual wellness, prioritizing industrial employment, and consistently narrowing income and development gaps. Additionally, there is an emphasis on deepening cooperation between economically developed counties (cities, districts) in the eastern region and poverty-stricken counties to promote revitalization, driving the undertaking and development of more labour-intensive industries in poverty-stricken areas.

It is crucial to support the development and growth of characteristic industries in poverty-stricken areas, emphasizing long-term cultivation of industries, respecting market laws and industrial development laws, enhancing competitiveness and resilience in industrial markets, promoting stable employment for the poverty-stricken population, ensuring continuity of talent and intellectual support policies during the poverty alleviation period, and establishing a robust long-term mechanism to guide various talents in serving rural revitalization.

2. Basic Approach of the Investigation

The investigation focuses on addressing challenges faced by resource-scarce areas in selecting, establishing, and strengthening industries, as well as fostering continuous endogenous development in rural areas. Feasible and practical measures are proposed to serve as references for similar regions. Therefore, as shown in Figure 1, based on domestic and international rural development theories and models, and following the approach of “identifying problems-analyzing problems-solving problems,” a comprehensive investigation is conducted to examine the status of resources in Baiyintela Village. In-depth research is conducted on its industrial development, with a particular focus on identifying the key factors hindering its industrial growth. Considering market demands and regional industrial structures, this study proposes a solution for revitalizing rural industries in non-resource-endowed areas, with Baiyintela Village chosen as the study subject.

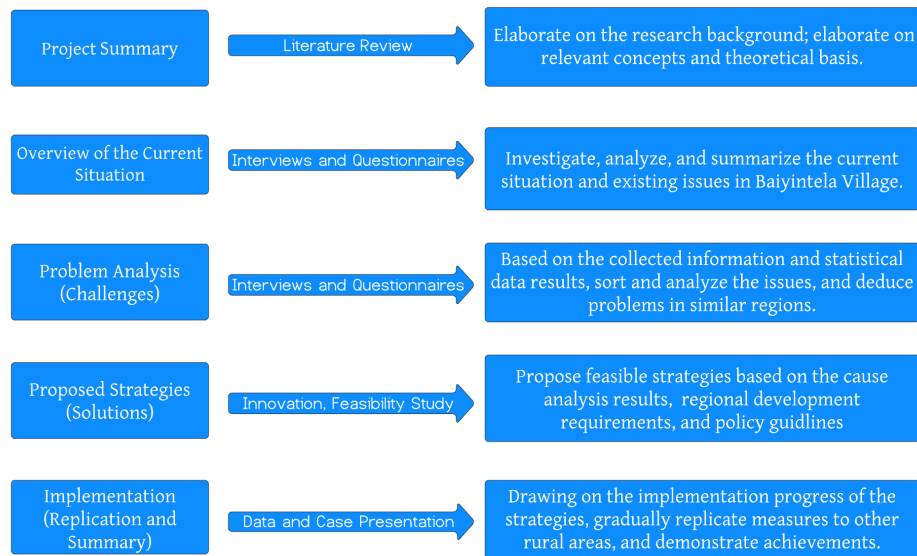


Figure 1: Basic conceptual model of the investigation

3. Research Process

The field investigation began in 2018, with a ten-day research trip to Baiyintela Village in Huade County, Inner Mongolia Autonomous Region. More than ten villages were visited, and extensive on-site visits were conducted in Inner Mongolia Autonomous Region to identify issues related to poverty and low income. In 2018, another visit was made to Inner Mongolia Autonomous Region, with a total of two months spent in the villages. Following extensive visits to three villages and three regions, a comprehensive understanding of the core issues and underlying causes in non-resource-endowed areas was achieved. In September 2018, the research investigation and proposed solutions were officially initiated based on the findings.

3.1 Research Method

3.1.1 Semi-structured Interviews

The team conducted interviews with Wang Hua, the first secretary in Baiyintela Village, and Guo Yaohua, the secretary of the village party branch, as well as some residents. These interviews aimed to gather information on the village's resources, industrial structure, and cultural life.

3.1.2 Participatory Research

From 2018 to 2023, the team carried out a comprehensive series of 5,347 on-site research investigations. They conducted in-depth visits to 132 households, one of which was facing poverty due to disability. By directly visiting households affected by disability-induced poverty, the team gained valuable insights into the practical effectiveness of targeted assistance measures for impoverished households.

3.1.3 Literature Review

By reading, analyzing, and organizing relevant literature materials, a comprehensive and accurate study was conducted on cases of rural revitalization. A total of 19 documents were reviewed to identify and demonstrate similar issues in non-resource-endowed areas. Lessons were drawn from the experiences of rural revitalization and poverty alleviation in similar regions, and the feasibility of proposed solutions was explored. Finally, a practical implementation plan was formulated.

3.1.4 Questionnaire

The team conducts a survey about basic education and poverty alleviation. A total of 1000 questionnaires were distributed in 10 villages near Baiyintela Township, with 950 questionnaires deemed valid. In 2019, the team conducted a feasibility analysis for the packaging box project and distributed 600 questionnaires in 3 villages, of which 591 were valid. The survey aimed to gather information on villagers' income sources and employment status, and a total of 591 questionnaires were distributed, with 487 being considered valid.

3.2 Location Analysis of the Research Area

Baiyintela Village is located in Baiyintela Township, Huade County, Ulanqab City, Inner Mongolia Autonomous Region, China. Huade County has a total developed and utilized soil natural resource area of 22.765 million cubic meters. Baiyintela Township covers a total land area of 15,117 mu, with 5,126 mu being arable land, including over 2,000 mu of irrigated land, and 9,200 mu of forest and grassland. The county is crossed by more than ten seasonal rivers, with a total water area of 2,214 square kilometres. These rivers flow during rainy seasons, but the river channels often dry up during dry spells.

The environmental factors in the village have impacted agricultural production, resulting in low per capita income for farmers. This is mainly reflected in four aspects: Firstly, the water resources in Huade County mainly rely on atmospheric precipitation, and the distribution of rainfall is uneven. Secondly, the cold and dry climate during winter limits the cultivation period to only three months, which affects the output of crops; Thirdly, the natural resources of soil in Huade County are relatively poor, mainly concentrated in the Chaoyang Basin and Deshan-Kuangu Depression. Lastly, the serious loss of labour force and an aging population have led to villagers being limited to engaging in simple jobs with low physical demand.

4. Result

The team visited over 30 villages in Huade County, collecting 7324 valid data points. More than 578 semi-structured interviews and conducted 275 field surveys were conducted. The survey covered a population ranging from 6 to 80 years old, primarily involved in agricultural and animal husbandry activities. The main source of villagers' income relied on year-round livestock farming, primarily sheep, cattle, and chicken. The main agricultural crops grown from June to October included rice, cabbage, potatoes, and mushrooms. The economic income was relatively low. According to statistics, there were 550 households with 946 registered residents, 456 households with 980 permanent residents, including 280 households with 420 residents in the Happy Home (a senior care facility), and 12 households identified as impoverished. The population consisted of 17 individuals below the age of 16, 120 individuals between the ages of 17 and 59, and 71 individuals aged 60 and above. The age group between 17 and 59 primarily sought employment opportunities outside the village, while the elderly population aged 60 and above constituted the main demographic group in the area (Baiyintela Village).

4.1 Nature

Baiyintela Village is located within the Inner Mongolia Autonomous Region. The local climate is characterized by a temperate continental climate, which poses challenges for agricultural activities. The winter season is long, while the spring and summer seasons are short. There are significant temperature differences between day and night, and the region experiences low precipitation and frequent droughts. These factors result in a shorter production cycle, lower crop yields, and increased risks of drought-induced water scarcity or crop damage caused by freezing temperatures. As a result, agricultural production is not suitable for the area, and the average annual income for farmers is only 1,000 yuan per person. Therefore, there is an urgent need for alternative pathways to lift the community out of poverty and achieve prosperity.

4.2 Culture

Baiyintela Village faces significant challenges due to its aging population. The villagers have developed unhealthy habits, leading to a monotonous lifestyle, a sense of emptiness, and a lack of motivation to pursue wealth and prosperity. According to the first secretary stationed in the village, prior to 2017, villagers engaged in monotonous activities, often spending their time sunbathing against the walls, engaging in idle talk, singing songs, or playing games such as marbles and mahjong.

4.3 Life

The lack of basic infrastructure in Baiyintela Village results in a low quality of life for its residents, primarily manifested in four aspects: Firstly, the road facilities are inadequate. Most of the roads are unpaved and lack streetlights, making it difficult for herders to navigate at night, often resulting in lost sheep. Secondly, the sanitation facilities are insufficient. The village lacks household toilets and only has 16 scattered public dry toilets. In winter, the cold and slippery conditions make it challenging, while in summer, there is a persistent foul odour. The first village secretary had considered installing flush toilets, but Huade County faces water scarcity, and the construction of a water supply and drainage network is a significant and costly undertaking. The village also lacks public bathing facilities, forcing residents to travel over 20 kilometers to the county town for bathing, and they usually resort to using towels for personal hygiene. Thirdly, the heating facilities are outdated. Every year during winter, villagers rely on coal for heating, which increases the risk of carbon monoxide poisoning, making winter a high-risk period.

Based on the research findings, the team has identified several challenges in the rural revitalization process. These include a reliance on a single economic industry structure and a lack of momentum for development. The villagers exhibit limited interest in cultural and entertainment activities, indicating a low demand for cultural engagement. Furthermore, there is a lack of basic infrastructure development, despite a strong desire for an improved quality of life. In addition, impoverished villages in Huade County face specific challenges, such as high costs for e-commerce delivery, poor efficiency in agriculture and animal husbandry, and the low economic value of traditional industries. Consequently, there is a pressing need to transform the traditional approach to poverty alleviation, which has been focused on product-oriented strategies, in order to address these issues and achieve sustainable development.

5. Conclusions

After conducting investigative research, it has been found that there are several main issues in Baiyintela Village, Baiyintela Township. In terms of industrial development, the village faces challenges due to scarce natural resources, low agricultural and livestock production, and a significant distance from major agricultural markets. Currently, there is no dominant and advantageous industry or collective industry in the village. In response to this situation, a solution has been proposed. The proposed solution involves adopting the “branch-enterprise-workshop-landmark industry-platform supply chain” model to establish a foundation for developing a landmark industry. Additionally, it focuses on addressing the shortcomings of rural human resources by enhancing the development and allocation of such resources. The model emphasizes a sustainable development approach centred around strengthening rural human resource development and exploring a “consolidate-walling” model with an improved farmer training system as its core. This model aims to provide integrated services in packaging design, marketing, and other industries, catering to the needs of both the government and individuals. Collaborating with packaging production enterprises, this solution aims to contribute to the revitalization of rural areas.

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