

Rural Hollowing-Out Revisited: A Comparative Literature Review Between China and Japan

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Abstract: The issue of rural hollowing out is not unique to China, as various countries worldwide have witnessed different degrees of this phenomenon during the process of urbanization. Japan and China, among those nations grappling with rural hollowing out, share noteworthy similarities, rendering Japan's governance experience particularly instructive for China. This paper undertakes a comparative analysis of Japan's issues with rural over-saturation and China's challenges with rural hollowing, revealing disparities in the formation mechanisms and timelines of these phenomena in the two countries. Notably, China experienced the hollowing-out problem later than Japan, and the process unfolded at a swifter pace. Examining governance policies, Japan advocates for the autonomous development of hollow villages in later stages. China stands to benefit by adopting Japan's supportive policies for rural areas, such as the 'one village, one product' initiative, which encourages hollowed villages to explore their unique strengths and specialize in products for endogenous development. In the realm of coordinating urban-rural relations, China can draw inspiration from Japan's strategy of "supporting rural areas with cities." This entails fostering rural development by investing in education and healthcare infrastructure in central cities, thereby promoting urban-rural integration.

Keywords: Rural hollowing out, China, Japan, Literature comparison, Policy implications

1. Introduction

Since the initiation of economic reforms and opening up in China, the country's economy has undergone rapid development. A notable aspect of this progress is the substantial increase in urbanization, signifying the swift economic advancements in the nation. In 2011, the urban population in China surpassed the rural population, reaching 51.83%. By 2021, this urban population had further surged to 64.72%, while the rural population accounted for only 35.28% of the total populace. Cities, distinguished by their flourishing economies and superior public services, consistently attract high-quality labor from rural areas. The advancement of agricultural technology has concurrently resulted in increased agricultural efficiency, diminishing the demand for agricultural labor. This, in turn, has exacerbated the outflow of rural labor and contributed to the hollowing out of rural industries. Consequently, this phenomenon poses a significant impediment to the overall development of rural areas. In recognition of these challenges, China articulated a strategy for rural revitalization during the 19th National Congress. However, despite these efforts, the trend of rural hollowing out persists. The prevailing scenario in many rural areas is characterized by the underdevelopment of industries

and the continual outflow of the labor force. Addressing and mitigating rural hollowing out remains a focal point in the ongoing rural revitalization initiatives. Consequently, the study of rural hollowing out has evolved into a core concern within the realms of rural geography and rural development research in China. Current research predominantly revolves around three key issues: fostering rural economic development, judicious utilization of rural land, and enhancing governance quality and performance in rural areas.

Developed countries, owing to their early urbanization processes, have not encountered significant imbalances in the urban-rural population structure. The issue of population hollowing out primarily arises from declining fertility rates and an aging population. While Western research extensively explores the characteristics of urban-rural population mobility, China, despite a burgeoning interest in the field, entered the research on hollowing out relatively late. Presently, research efforts concentrate on promoting rural economic development, enhancing the living conditions of rural residents, stemming the outflow of the rural population, and addressing large-scale unemployment and de-industrialization.

It is undeniably apparent that significant disparities exist in urbanization mechanisms, developmental stages, land ownership, cultural systems, policies, and economic and social development levels between China and Western countries. Consequently, research questions, perspectives, goals, and policy priorities vary among nations. Existing theories and empirical experiences derived from European and American countries may prove inadequate in comprehending the hollowing-out mechanisms of rural areas in China. As an East Asian nation, Japan has also undergone a wave of urbanization driven by industrialization. Since the 1960s and 1970s, its population has consistently migrated from rural to urban areas, resulting in the hollowing out or over-sparseness of rural regions. As of April 2017, among the 1718 cities, towns, and villages in Japan, 817 displayed signs of hollowing out, constituting 47.6% of the total. The overcrowded area encompassed 225,468 square kilometers, representing 59.7% of the country. Given that Japan is a neighboring country in East Asia with numerous political and cultural similarities, the issue of hollowing out in rural areas in our country may share similarities with Japan. Japan has grappled with the oversimplification problem for five to six decades, accumulating a substantial body of research results and governance experience. This wealth of knowledge holds significant reference value for China. Therefore, this article utilizes Japan's research and governance of rural hollowing as a benchmark to compare the current situation of hollowing in rural areas in China. Through this comparative analysis, the governance experiences of China and Japan are juxtaposed, and the similarities and differences in the formation process, reasons, characteristics, and effects of rural hollowing in both countries are thoroughly examined. In conjunction with China's national conditions, the article proposes relevant research directions and policy governance references for addressing rural hollowing in China.

2. Hollow Rural Areas: Research Trends in China and Aboard

2.1. Foreign Research

The exploration of the formation mechanisms of the rural hollowing phenomenon dates back to the 19th century, where Western scholars employed various theories to elucidate the phenomenon of rural depopulation. In the late 19th century, Howard introduced the theory of pastoral cities to address the shortcomings in urban-rural development by integrating both urban and rural areas. Economist Lewis, in his 1950s work "Economic Development under the Condition of Infinite Labor Supply," utilized the Lewis model to categorize all economic sectors into agricultural and industrial sectors. He asserted that, during specific stages of economic development, the migration of practitioners from the agricultural sector to the industrial sector is an inevitable occurrence. In the 1990s, Todaro posited

that the substantial influx of population into urban areas was primarily driven by the income gap between urban and rural areas, considering both income and redistribution factors [1].

Regarding the governance of rural hollowing out, different countries have adopted diverse policies. In the United States, for instance, the rapid development of urbanization and industrialization in the 1980s resulted in an urban-rural development imbalance. Some rural areas experienced issues such as negative population growth and labor shortages. Consequently, the United States supported rural social welfare organizations and devised a governance plan for "urbanized villages" to foster balanced development between urban and rural areas, thereby mitigating rural hollowing out. In the 1960s, France underwent a substantial migration of rural populations to cities, causing stagnation in rural development. Subsequently, the French government implemented policies focused on agricultural modernization and urban-rural integration, leading to swift rural modernization. In Germany, the phenomenon of hollowing out rural areas is less conspicuous, primarily due to the concept of "township cities," where cities and rural areas coexisted and developed together during the rapid industrialization. Notably, Western countries predominantly employed government governance to bridge the urban-rural gap, with a concentration on rural hollowing out governance in the latter half of the 20th century.

Presently, rural hollowing out is not a pronounced phenomenon in European and American countries. Consequently, the existing body of research predominantly centers on developing countries, particularly in Asia. Menelaos Gkartzios [2] conducted a comparative analysis of rural hollowing out governance policies in China, Japan, and South Korea, juxtaposed with those of other nations worldwide. His findings affirm the effectiveness of existing policies in narrowing the urban-rural gap and optimizing public resource allocation. Michael Woods [3] posits that the structural adjustment of rural areas in China is a dynamic and multifactorial process. Given China's centralized political system and robust governmental capabilities, Woods suggests the potential for China to draw lessons from France's top-down planning models for rural development. In contrast, Hans Westlund [4] conducted a comparative study of villages in China and Sweden, highlighting that China's rural revitalization efforts should be tailored to local conditions. Westlund argues for the incorporation of more bottom-up measures, in collaboration with government policies and "place-based" regional development plans.

2.2. Domestic Research

In contrast to developed Western countries, China's urbanization process commenced later. The significant acceleration of China's urbanization unfolded primarily since the initiation of economic reforms and opening up in the 1980s. Within a mere twenty years, the urban population surpassed that of the rural areas. The phenomenon of rural hollowing out entered public awareness in the early 21st century and garnered academic attention after 2010. A comprehensive review of relevant literature in Chinese academic journals reveals that the issue of rural hollowing out has become a focal point for Chinese scholars, with a growing body of research dedicated to this concern. These studies broadly center around three main focal points:

Firstly, considerable attention is directed towards issues such as extensive population mobility and uneven urban-rural development. According to Zhang Tianjian [5], rural hollowing out primarily results from lower rural incomes, inadequate land transfer mechanisms, and an overall lower quality of life for farmers. To address this, measures such as talent introduction and retention, improving land use structure, preserving and fostering local culture, strengthening grassroots construction, and prioritizing team training are proposed. Han Qingling [6], from an educational perspective, emphasizes the two-way flow of students and teachers between rural and urban areas, highlighting a "dual weakness" pattern. Strengthening support for rural basic education is suggested as a crucial step to prevent further rural hollowing out. Gong Lishan [7] identifies industrial hollowing out as the core

reason for rural hollowing out. Xing Boyuan [8] delves into the relationship between aging and hollowing out, advocating for government efforts to enhance the living conditions and infrastructure for the elderly left behind, ultimately addressing rural hollowing out through the consolidation of natural villages.

In addition, the depletion of rural land is attributed to unreasonable planning. Zhang Zhao highlights the absence of planning in villages, where large land parcels are haphazardly sold. For instance, newly constructed rural houses often cluster along convenient transportation routes, while the interior of villages predominantly features abandoned old houses, resulting in substantial wastage of homestead land. Citing a case in Shandong Province, Zhang Tianjian [5] observes that nearly 30% of arable land in the village is abandoned, contributing to continuous village expansion and a gradual reduction in arable land. Proposed solutions involve reinforcing land transfer mechanisms and enhancing the structure of land use. Yuan Ying [9] underscores the desertification of land and challenges in land transfer as key aspects of rural land hollowing out. Suggestions include improving the sharing and optimization of land resources to enhance their effective utilization.

Thirdly, since the establishment of New China, the uncoordinated development policies regarding population, registered residence, and urban-rural economies have resulted in the hollowing out of our population. Su [10] notes that the accelerated reform of China's urban and rural registered residence system has driven a surge in rural population migration to cities and towns. Gong [7] attributes the hollowing out to the dual economic structure policy in the early years of China's founding, leading to delayed rural development and a widening urban-rural gap. Sui [11] asserts that China's reform and opening up policy has unleashed rural productivity, prompting a significant exodus of laborers from the land and contributing to the hollowing out situation.

While these studies shed light on the causes of the formation of hollow villages, there remains a gap in practical governance strategies for addressing this issue. The hollowing out of rural areas in our country differs from that in developed Western countries, involving a complex process with factors such as the urban-rural economic development gap, education, healthcare, and infrastructure. Consequently, governance methods employed by developed Western countries may not be directly applicable to China. There is a need to explore a rural hollow governance path aligned with China's unique national conditions.

2.3. Brief Summary

China, in contrast to developed Western countries, exhibits distinctive characteristics in the phenomenon of rural hollowing out, stemming from its unique economic, social, and cultural context. Unlike Europe and America, the governance experiences of these Western nations are not directly applicable to China. This disparity can be attributed to four primary reasons. Firstly, considering the historical trajectory of rural hollowing out, Western countries initiated industrialization earlier, underwent prolonged urbanization, and experienced a comparatively gradual development process. Conversely, China's industrialization commenced later, progressed rapidly, and witnessed a swifter pace of urbanization. Consequently, this accelerated development has widened the urban-rural gap. Secondly, China's population policy, fertility policy, and registered residence policy since the establishment of the People's Republic of China have indirectly exacerbated the urban-rural disparity. Moreover, examining the foundation of rural development reveals that developed European and American nations boast more comprehensive agricultural infrastructure, well-established agricultural product marketing channels, and advanced agricultural production equipment. In contrast, China's rural economy lags behind, lacking robust industrial support. Thirdly, analyzing the causes of rural hollowing out reveals that, in addition to the typical urban-rural development disparities, factors such as aging and declining fertility rates prevalent in Western countries are crucial contributors. Conversely, China's rural hollowing out is influenced by a more intricate set of factors, including

population registered residence policies such as "going up to the mountains and down to the countryside," the one-child policy, and the integrated development of urban and rural areas. Fourthly, traditional cultural values play a significant role, with the family concept in developed European and American countries not holding the same depth as in China. China's traditional Confucian culture advocates filial piety and family values, compelling many young individuals to migrate to cities for work and advancement. Seeking improved educational resources for their children and better support for the elderly, these individuals often choose to relocate their household registration to urban areas, hastening the depletion of the rural population.

Domestic researchers often direct their attention toward developed countries in Europe and America, neglecting Japan despite its closer resemblance to China. Japan, having undergone industrialization and urbanization earlier than China, has grappled with the issue of rural hollowing out for a more extended period, accumulating significant achievements and experiences in both academic research and policy governance. Importantly, the temporal and historical alignment of rural hollowing out in both countries makes Japan a particularly valuable source for learning and reference. Notably, Japan experienced the rapid development of urbanization and the onset of rural overcrowding primarily post-World War II, akin to the trajectory in China during the 1980s. The synchronicity in the timing and historical processes of rural hollowing out in these two nations enhances the relevance of Japanese experiences for Chinese scholars and policymakers. Furthermore, China and Japan share a common agricultural civilization, with agricultural culture deeply ingrained in their historical development. Both countries fall within the East Asian Confucian cultural circle, being profoundly influenced by Confucian values. The conservative nature of Confucian culture has deeply shaped the values and behavioral norms of both Chinese and Japanese societies. This cultural affinity and shared social norms create a foundation for valuable insights and references from Japan in the study and governance of spatialization behavior in Chinese rural areas.

3. Comparative Evaluation of Hollowing Out Issues between China and Japan

3.1. Characteristics of Japanese Related Literature

(1) The Historical Background of Rural Development in Japan

While Japan initiated industrialization through the Meiji Restoration in the late 19th century, leading to a substantial increase in national strength, urbanization did not witness significant improvement. The challenge of rural overcrowding in Japan manifested after World War II, unfolding in three distinct waves. The first wave transpired in the 1960s, a period marked by Japan's rapid economic growth. During this time, there was a pronounced migration of rural populations to urban centers, progressively widening the urban-rural gap and placing rural areas in a state of decline. It was during this era that the term "too sparse" was officially introduced as an administrative term in the 1960s. The second wave occurred in the late 1980s, characterized by a sustained outflow of population from mountain villages. Issues such as aging and mortality rates began to surpass birth rates, contributing to the challenges faced by rural areas. The third wave emerged in the 21st century, stemming from the simultaneous issues of declining birth rates and an aging population. This wave brought forth the problem of over-scarcity, notably represented by the challenges posed by bounded settlements.

The Japanese government initiated measures to govern sparsely populated rural areas in 1970, enacting the first Population Sparse Act, officially titled the Population Sparse Area Strategy and Urgent Measures Act. In 1980, the government introduced the Special Measures Law for Revitalization of Over-sparse Regions, with the objective of addressing issues like aging and low social function in excessively sparse areas. The goal was to promote employment, enhance residents' quality of life, and narrow the urban-rural gap. Subsequently, in 1990, the Japanese government

implemented the Special Measures Act for the Revitalization of Areas with Excessive Sparsity, aiming to further rejuvenate rural industries, improve living environments, and increase investments in elderly care. In the year 2000, the Japanese government introduced the Special Measures Act for Promoting Self-Reliance in Regions with Excessive Sparsity. This legislation underscores the importance of harnessing the potential within rural areas themselves. Through measures such as safeguarding natural landscapes, revitalizing regional culture, and fostering diverse regional industries, the government seeks to encourage the development of independent and self-sufficient endogenous capabilities in sparsely populated areas. While these policies and laws have played a role, they are not without their shortcomings. Thomas Feldhoff [12] contends that the Japanese government should not solely concentrate on the development of rural agriculture. Instead, Feldhoff suggests expanding the scope of industrial policy support to encompass other economic sectors like the service industry, tourism, and manufacturing.

(2) Characteristics and Focus of Research on Hollow Rural Areas in Japan

Research on rural overcrowding in Japan primarily centers on analyzing key factors, including the decline of pivotal rural industries, the living conditions of elderly populations in crowded rural areas, and the inadequacy of medical resources.

Firstly, a significant aspect of the research addresses the lag in rural economic development and the loss of industries. Tsumuta Ogi [13] highlighted that during Japan's high economic growth era, a substantial influx of talent migrated to urban industrial areas. Simultaneously, the surge in imports from abroad impeded the sale of agricultural products, resulting in the downturn of rural industries. Masao Kenji [14] underscored that due to industrial decline, rural populations lost jobs, compelling them to seek employment in metropolitan areas and the Pacific Rim industrial zone. Examining the issue from the standpoint of local finance, Kiyoko Hagihara [15] argued that direct support through auxiliary funds for sparsely populated areas might not effectively address the problem, emphasizing the need for cautious allocation and utilization of such resources.

Secondly, in the context of an aging society, there is a growing focus on the living challenges faced by rural residents, particularly the elderly. Mitani Kyoko [16], using Ruicho in Shimane Prefecture as an example, studied the living activities and spatial patterns of local elderly populations, highlighting issues such as limited activity range, monotonous lifestyles, and inconvenient transportation. Takahashi Tsuyoshi [17] noted that the outmigration of young people for work contributes to an increase in elderly individuals living alone, hindering local economic development. Takano [18] investigated the living structure of elderly people in sparsely populated villages in western Japan, pointing out that with the decline of regional groups and organizations, the social role of the elderly is gradually diminishing.

Finally, a critical concern revolves around the shortage of medical resources in sparsely populated areas. Kawakami Kanji [19] emphasized the lack of physicians in the Jinan area of Sanchong County and advocated for measures such as collaboration with local physician associations to address the regional gap in medical resources. Taking a medical perspective, Jun Uda [20] proposed strategies to cope with the aging of physicians and the establishment of a more efficient regional medical system. Shimizu Yoshiyuki [21] highlighted the profit-oriented nature of the capitalist medical supply system, underscoring the importance of revitalizing the local economy and fostering the willingness of physicians to stay and work locally when medical operations face challenges in stabilization.

(3) The Fundamental Reasons and Policy Research Core of Rural Hollowing Out in Japan

The rise of overcrowding in Japan primarily stems from the growth of urban industries, the unequal distribution of urban and rural resources, and the substantial migration of populations to urban centers. Academic research is predominantly centered on governance policies addressing overcrowding and the well-being of residents in densely populated areas. In the management of excessively sparse villages, the government's initial efforts involve funding investments, revitalizing industries, and

enhancing infrastructure. In subsequent stages, policies are crafted to foster the independent development of the region. Despite the implementation of various government policies that have shown some effectiveness in mitigating overcrowding, the overall pattern of population migration from rural to urban areas remains largely unchanged.

3.2. Analysis of Differences and Similarities in Literature Research between China and Japan

Table 1: Comparison of Hollowing Research between China and Japan

	China	Japan
Time	1990s	1960s
Background Differences	Rapid economic development in cities undergoing reform and opening up	The massive influx of foreign goods after the war has impacted rural industries
Driving Mechanism	Economic gap between urban and rural areas, registered residence policy	Mainly due to the urban-rural gap [22]
Characteristics	Develop rapidly	Develop slowly
Government Policies	Emphasize the revitalization of the rural economy, industry, culture, and infrastructure	Pay attention to improving rural life, reducing population outflow, and attracting population return. Emphasis on independent rural development in the later stage [23]
Population Characteristics	Large population size, aging population, one-child policy	Small population size and aging of children
Agricultural Structure	Small-scale agricultural economy	Family farms and cooperatives
Relationship between Urban and Rural Areas	Integrated urban-rural development	Using the city to support the countryside
Remedial Measures	Rural revitalization strategy, comprehensive development of socio-economic integration, and construction of characteristic towns [24]	One Village, One Product, Rural Tourism Industry [25], Emphasizing Industrial Revitalization
Future Trend	Continue to increase	Tend to flatten out

While there exist variances in the phenomenon of rural hollowing out between China and Japan, numerous similarities are also apparent. The root cause lies in the swift progress of urbanization and industrialization, coupled with a substantial disparity in economic development between urban and rural areas. This discrepancy has resulted in a significant migration of young labor forces from rural to urban settings. Concerning population structure, both nations have encountered issues of aging and negative population growth, exacerbating the hollowing out of their respective rural areas. In terms of infrastructure development and public services, both rural regions face challenges with underdeveloped infrastructure, including deficiencies in education, medical care, and transportation services. The inadequacy of these essential services contributes to the overall hollowing out effect in rural areas.

Analyzing the hollowing out of rural areas in Japan provides valuable insights for research in China and offers solutions for addressing the three rural issues. Firstly, in tackling the challenges faced by farmers, China should intensify its focus on the aging population and prioritize the well-being of elderly individuals in depopulated rural areas. The Japanese government's emphasis on enhancing the lives of elderly residents in remote villages and improving facilities catering to their needs serves as a noteworthy example. China, in addressing the aging population in rural areas, should fully consider the needs of the elderly. This involves enhancing elderly care facilities, promoting literacy among farmers, and cultivating their sense of social responsibility. Additionally, drawing inspiration from Japan, which emphasizes community cooperation and resident participation, China can enhance residents' sense of identity and local attachment to rural areas through the construction and development of community communities. China can further learn from Japan's experience in community cooperation to promote community participation, influence the planning and decision-making process related to cooperative development, and strengthen community autonomy and shared awareness.

Secondly, in addressing agricultural challenges, there should be a focus on leveraging rural advantages and supporting the development of rural industries. The common issue of industrial revitalization and transformation in Japanese rural areas aligns with the current developmental needs of China. Chinese rural policymakers can actively learn from Japan's success in developing rural tourism and other service industries. They should pay attention to combining the unique characteristics of villages with socio-economic foundations and formulate differentiated and distinctive development strategies. Emulating Japan's "one village, one product" strategy, China can explore advantageous agricultural products based on the strengths of each village, thereby improving specialization and the economic and social added value of characteristic agglomeration industries.

Thirdly, in addressing rural issues, particular attention should be given to resolving rural land concerns. While Japan, due to its small land area, emphasizes improving land use efficiency, China should also focus on enhancing land use efficiency. This involves addressing challenges such as rural land circulation, vacant houses, and abandoned farmland. Recognizing the historical relatively less support provided by the Japanese government for infrastructure construction and economic development in rural areas, China needs to further promote the equality of urban and rural infrastructure. This requires increased funding, promotion of medical and educational development in rural areas, improvement of the rural infrastructure system, and enhancement of the attractiveness and development potential of rural regions.

4. Conclusion

In conclusion, this article derives from our comprehensive literature review that Chinese scholars predominantly draw insights from developed countries in Europe and America to study hollowed-out rural areas in China. Nevertheless, the stark differences between the situations in Europe and America and those in China imply that these sources may not offer robust academic knowledge and policy guidance applicable to the Chinese context. Three key reasons underpin this discrepancy: Firstly, the hollowing out of rural areas in China is not solely a consequence of globalization and industrialization but also mirrors social development challenges within the rapid urbanization and industrialization process. The traditional rural industrialization process faces impediments from the forces of urban market-based capitalism; Secondly, owing to the constraints of the registered residence system and the urban-rural dual structure stemming from China's fiscal decentralization system, substantial disparities exist in socio-economic development, education, healthcare, infrastructure, and even cultural psychology between cities and villages; Finally, since the reform and opening up, particularly since the 1990s, China's neoliberal spatial development policy, coupled with the recent ecological civilization-guided approach of "focusing on environmental protection and reducing growth," has

perpetuated a scenario where cities continue to dominate rural areas in terms of development opportunities. This dominance accentuates the challenges of rural urbanization, setting it apart from the dynamic issues faced in the Western context.

Therefore, this article endeavors to compare the literature on the hollowing out of rural areas between China and Japan. It analyzes the similarities and differences between rural hollowing out in China and the phenomenon of over-thinning rural areas in Japan. The goal is to glean insights from Japan, a nation with circumstances more akin to China's, to offer guidance on addressing the issue of rural hollowing out in China. The comparative analysis of literature reveals disparities in the formation mechanisms and timelines of rural hollowing in China and Japan. In contrast to Japan, China's hollowing out is not solely influenced by the urban-rural gap but is also affected by the registered residence policy. Moreover, the onset of hollowing in China is more recent, spurred by rapid development and urbanization since the founding of New China. Additionally, the prevalence of left-behind children in China is a noteworthy phenomenon. While learning from Japan's approach to enhancing elderly care services, it is imperative to also focus on the well-being of left-behind children, increasing investments in their lives and education. In terms of governance policies, Japan encourages the independent development of hollow villages in later stages. China can learn from Japan's "one village, one product" policy, fostering independent development in hollow villages based on their unique strengths and products. Simultaneously, efforts in China to enhance characteristic towns should continue, leveraging the distinct features of different villages to develop tertiary industries like characteristic town tourism. Coordinating urban-rural relations offers another facet for improvement. Drawing inspiration from Japan's strategy of supporting rural areas with cities, China can promote rural development by encouraging education and medical radiation from central cities. Simultaneously, emphasis should be placed on enhancing urban-rural integration, improving transportation and logistics between urban and rural areas, fortifying connections, and advocating for integrated urban-rural development to minimize disparities.

The issue of rural hollowing out and its governance stands as an imperative subject within China's rural revitalization efforts. Future research in this area should concentrate on advancing rural agriculture and the tertiary industry, fortifying rural economies, enhancing infrastructure, narrowing the urban-rural gap, and enticing the return of the rural population. Attention must also be directed towards the lives, livelihoods, and social infrastructure of farmers, with a particular focus on the well-being of the elderly and left-behind children. Addressing these facets comprehensively will be pivotal in steering China's rural areas towards sustainable revitalization.

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