

# ***Research on the Depopulation and Aging in Rural Japan and the Implication for China's Development***

**Jiahe Wang<sup>1,a,\*</sup>**

<sup>1</sup>*Economics, Dana and David Dornsife College of Letters, Art and Sciences, University of Southern California*  
*a. wangrebe@usc.edu*

*\*corresponding author*

**Abstract:** Rural depopulation has emerged as a significant challenge in China, hampering economic growth in rural regions and exacerbating the rural-urban divide. This phenomenon is not unique to China; Japan experienced a similar trend years earlier, making Japan's experience a valuable point of reference. In both countries, young people have migrated to cities in search of better opportunities and more desirable lifestyles, leaving rural areas grappling with social dysfunction and economic stagnation. In response, the Japanese government implemented rural revitalization policies and offered newborn subsidies to counteract these trends. However, the effectiveness of these measures has been limited, sparking debates over whether intervention in rural depopulation is truly necessary or beneficial. Despite these challenges, the experience highlights a critical lesson for China: the role of rural areas in sustaining long-term national growth is irreplaceable, and intervention may be necessary if the depopulation trend continues to worsen. Rural revitalization, which involves the initiation and gradual privatization of rural industries as well as the formation of a rural-specified lifestyle, can strategically attract and retain residents in rural areas. One potential solution for China could be a well-managed immigration policy, which Japan has only recently begun to consider after years of less effective interventions. By doing so, China could address depopulation more effectively, fostering balanced development and ensuring the vitality of its rural regions.

**Keywords:** Population Growth, Rural Development, Rural Revitalization, Fertility Rate.

## **1. Introduction**

According to the World Bank, the global rural population decreased from 3.435 billion in 2020 to 3.432 billion in 2021, which was the first negative growth since 1961 [1]. Rural depopulation and aging prevail not only in developed countries but also in developing countries such as China. The consequences of the aging population, including lack of labor forces, insufficient economic growth fuels, and difficulties in social care provision, make this issue concerning for the government. While China is still at the edge of depopulation, the author believes it is helpful to seek possible measurements from the experience of other countries.

The academia has recognized the similarities between Japan's and China's development paths. Whether China will be the next Japan has been a popular topic of discussion. Indeed, China and Japan share various similarities.

The Japanese economy experienced a rapid growth stage from the 1950s to the 1960s and then shifted into a medium growth stage in the 1970s, which was reflected by a roughly 5-7% drop in its GDP growth rate [2]. Since the 1990s, Japan has maintained its growth rate at around 1%, signaling a stagnation in its economic growth. Similarly, the economic growth rate of China soared after the economic reform in the 1970s and decreased to the middle level after the financial crisis in 2008. Both countries started as world factories to boost economic growth and began to seek technological advancement after decades of development.

Besides a likeness in economic development, Japan and China also displayed resembling trends in population growth, as shown in Figure 1. After high population growth periods, both countries faced a decrease in population growth and successive negative growth in population. Consequently, an aging population and a lack of labor force have been troubling both Japan and China in recent years, threatening both nations' sustainable development. Japan underwent an earlier and more drastic decline in population than China and introduced a series of policies to curb this trend, which allowed China to learn from and look for solutions for its future issues.

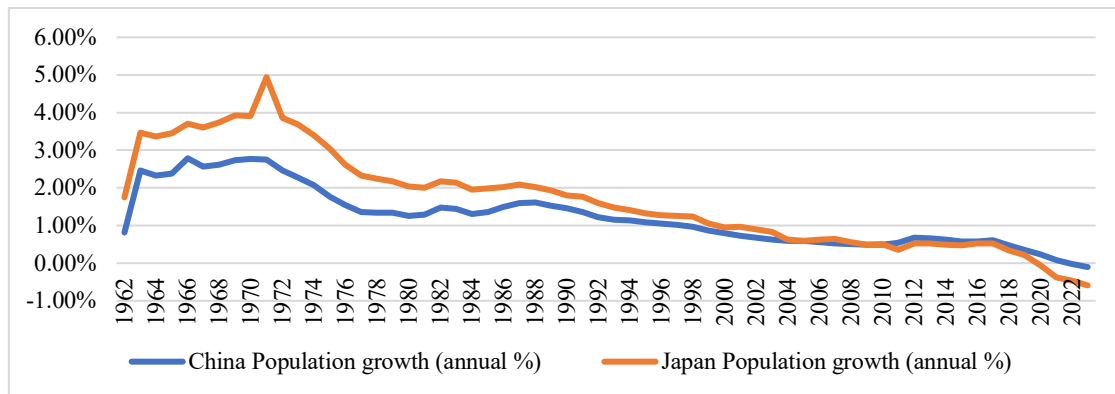


Figure 1: Population Growth Rate of Japan and China

(Note: Population growth (annual %) - China. World Bank Open Data. (2024c). <https://data.worldbank.org/indicator/SP.POP.GROW?locations=CN>)

China and Japan shared a history as an agrarian society: the countryside constituted a great portion of the society for both countries, while due to industrialization, both countries experienced rapid urbanization and labor migration from rural areas to cities [3]. Rural revitalization has become a major task for both China and Japan., as shown in Figure 2.

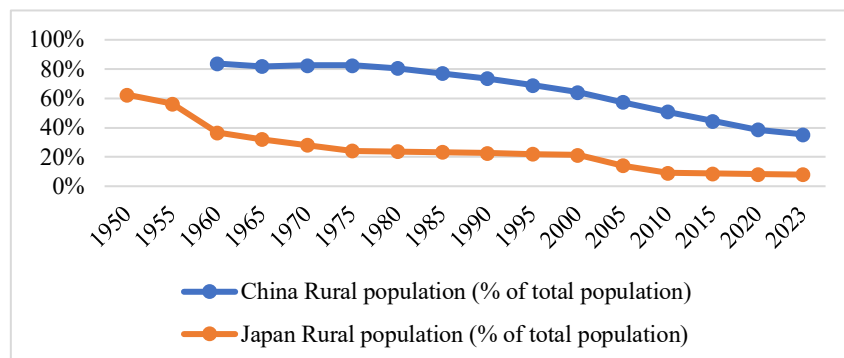


Figure 2: Rural Population Percentage of Total Population in Japan and China

(Note: China Rural Population 1960-2024. MacroTrends. (2024). <https://www.macrotrends.net/global-metrics/countries/CHN/china/rural-population#:~:text=China%20rural%20population%20for%202021,a%202.48%25%20decline%20from%202018>. Japan Rural Population 1960-2024. MacroTrends. (2024b). <https://www.macrotrends.net/global-metrics/countries/JPN/japan/rural-population#:~:text=Aggregation%20of%20urban%20and%20rural,a%201.49%25%20decline%20from%202020>)

In spite of the comparability, China differs from Japan in the level of economic development: although China's economic volume exceeds Japan's, Japan outweighs China on a per capita level. "Japan began its process of catch-up with the West about hundred years earlier than China [3]." Furthermore, China and Japan vary in terms of political frameworks as well as natural landscapes and resources. Hence, China, in general, followed a similar development path to Japan's, resulting in the reference significance of Japan's current challenges and potential for China's future growth, whereas the differences between the two countries led to China's unique problems, such as serious imbalances in development and the need for new sources for economic growth.

Kim's research on rural depopulation in Japan concluded that many villages had lost self-governance ability due to depopulation and relied on government subsidies to survive, and while they were in an attempt to resume self-governance, the progress did not look positive [4]. The return of the young population is critical for solving this issue. Mao's research on the relocation intentions of Japanese youth towards rural areas suggested that the young generation preferred rural areas for their lifestyle but were discouraged by the lack of opportunities, so the future aim of rural construction should be a tranquil environment with sufficient opportunities [5]. Osanai and Yu's comparative study on regional revitalization in Japan and South Korea found that although facing similar issues, Japan and South Korea took different approaches to coping with the difficulties [6]. Japan focused on regional revitalization policies, such as preventing rural outflow of labor force, whereas South Korea chose to fill the labor shortage with foreign immigrants, which, in the belief of the authors, could be an inevitable trend in the future world [6].

As the existing studies indicate, depopulation and aging in rural Japan have been long-standing and well-studied topics. Comparisons on rural depopulation in Japan and many countries, except China, have been drawn. Scholars have conducted analyses of various aspects in Japan and China, but not rural depopulation. The lack of comparative research on depopulation in Japan and China suggests that the implications of Japan's current issues for China's future development have not been fully identified.

This paper aims to investigate rural depopulation, the reasons for this phenomenon, and related policies in Japan, and discuss the possible solutions for China's rural aging and depopulation issue from the investigation of Japan. From the case study of Japan and China's rural depopulation issue, the paper then delves into the specific problems emerging in the Japanese and Chinese societies and the suggestions for China with reference to the rural depopulation in Japan. A better understanding of the current Japanese society can be critical to contain the aging and depopulation trend in rural China.

## 2. Case Description

Since the 1960s, out-migration to urban areas has caused serious aging and depopulation in rural Japan. Today, this phenomenon has spread to the whole society. Japanese society is shrinking due to the low fertility rate and its rigid immigration policy.

In the early 1950s, Japan experienced an increase in population due to the end of the war. The situation shifted quickly after the industrialization in cities in the 1960s: youths migrated to urban areas to pursue job opportunities and left an aging rural Japan behind them [4]. In 2010, "61.6% of commercial farmers were 65 and older, nearly double the percentage in 1990 [7]." "74% of farmers age 65 to 69 are working the land with little to no help, and the corresponding figures for the 70–74 and 75-and-over age groups are 66% and 50%, respectively [8]." In other words, rural farmers now lack capable successors. The following graph shows the change in rural population in Japan, indicating a drastic drop in rural population.

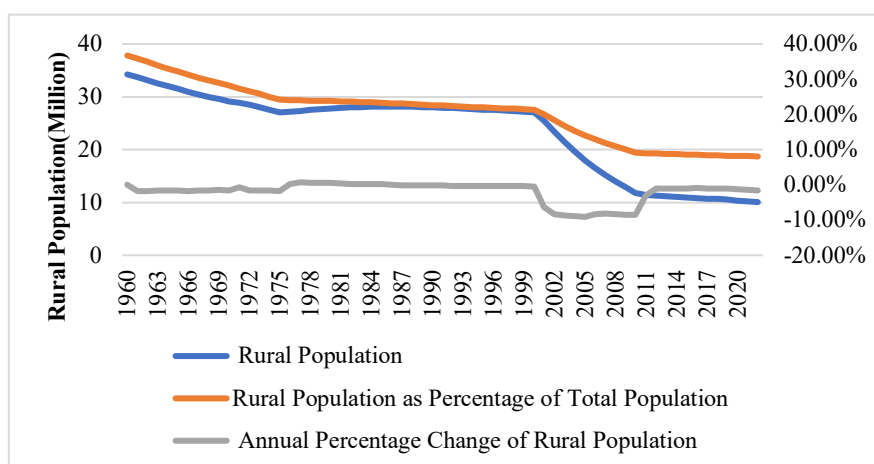


Figure 3: Rural Population in Japan

(Note: Japan Rural Population 1960-2024. MacroTrends. (2024b). <https://www.macrotrends.net/global-metrics/countries/JPN/japan/rural-population#:~:text=Aggregation%20of%20urban%20and%20rural,a%201.49%25%20decline%20from%202020>)

Due to rural depopulation and aging, the self-governance in many of the villages in Japan has failed to continue working, forcing the government to step in. Overconcentration in cities, such as Tokyo, and depopulation in the countryside kept worsening. To combat this concerning trend, the Japanese government implemented the “regional revitalization” and the financial transfer scheme. To protect the Japanese culture, the government took a conservative standing on the immigration policy.

During the Covid-19 pandemic, the situation escalated due to a drop in number of marriages, and the continuing trend of out-migration from rural areas remained.

The situation is rather similar in China. The outflow of the rural population to cities has caused serious rural depopulation in China, resulting in the underutilization of land, risk to homeland security, and a reduction in rural social capital [9]. Figure 4 shows the decrease in rural population in China in recent decades: although milder than Japan’s, the rural depopulation in China displays a steady and continuous trend that shows no signal of alleviation. Furthermore, China is experiencing rural depopulation and a slow national population growth during its developing stage, which adds to the severity of the problem.

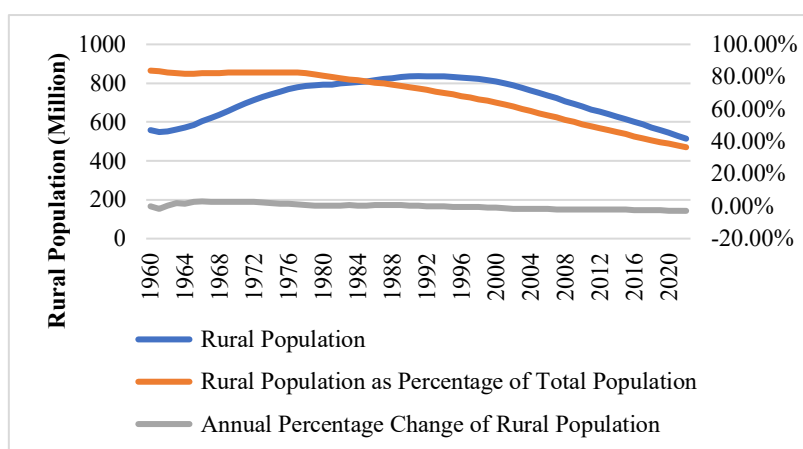


Figure 4: Rural Population in China

(Note: China Rural Population 1960-2024. MacroTrends. (2024). <https://www.macrotrends.net/global-metrics/countries/CHN/china/rural-population#:~:text=China%20rural%20population%20for%202021,a%202.48%25%20decline%20from%202018>)

To ease the pressure on the population, China introduced the National Population Development Plan and “rural revitalization”.

### 3. Analysis of the Problems in Existing Policies

The following part focuses on the issues in Japan’s existing policies. There are three main problems: the lack of effectiveness, budget pressure, and the debate on the necessity of the intervention.

#### 3.1. Ineffectiveness of the Policies

Although the regional revitalization policy and the child allowance policy have been put out for years with much effort and funds being spent, the effectiveness of the policy is doubtful. The total fertility rate per woman in Japan has fallen from 2.1 in 1970 to 1.3 in 2023 [10]. The population is shrinking in Japan. As it is shown in Figure 3, the rural population showed a more worrying decrease.

The regional revitalization policy was introduced because the government believed that the main reason for rural depopulation was the insufficient infrastructure in rural areas, while the result suggested that this might not be the only or major reason for rural depopulation [4].

A survey of 1000 young people in Japan by the Nippon Foundation found that 56.5% of the young generations still preferred big cities over other regions. The two most popular reasons were “comfortable lifestyle,” chosen by 63% of interviewees, and “many entertainment options,” chosen by 51% [11]. Hence, although big cities may not be the top choice for most youths, rural areas are still not on the top list. For the youths, the various possibilities and freedom to choose are still tempting, while the tedious lifestyle in rural areas is out of date. On top of that, ample job opportunities in big cities were another influential factor, as 36% of the interviewees thought that “corporate promotion of remote work” could effectively address the population concentration in a metropolis [11].

Infrastructure, such as roads, has built a strong foundation for regional revitalization and population return, but this is not enough. Besides the construction of infrastructure, robust rural development demands a future transformation that fits the needs of the new generation.

In addition to the outflow of the rural population, the prevailing low fertility rate in the society is another reason for rural aging and depopulation. The rural population is still going to decrease even if the migration from the countryside stops as long as the population in the society is reduced. This is not only a rural problem; it is a problem for the whole society that demands a more fundamental change.

The child allowance does not stand as a solid reason for the parents to have kids. The government should identify the true cost of having kids, emotionally and financially, which the child allowance cannot simply compensate for. The difficulty of climbing up the social ladder and the danger of easily sliding down the ladder create uncertainty for the general public. The disappearing middle class in Japan has caused people of childbearing age to lose confidence in themselves and their children.

The rural depopulation is just an implication of the unbalanced development of Japan and requires a thorough change in society.

#### 3.2. Financial Burden on Government

The rural revitalization policy is mainly composed of infrastructure construction plans to connect the cities and rural areas in hopes of stimulating the rural economy and wealth trickling down from cities to countries. Other constructions aim at the welfare of the elderly or cultural protection. This infrastructure construction costs a considerable amount of money, and the local government is usually short of money due to the small number of taxpayers. Additionally, the centralized administrative

framework in Japan also denies the possibility of local government paying for itself. Hence, the financial burden of the regional revitalization policy entirely lies on the central government.

“The government plans to annually secure ¥3.6 trillion (\$23.2 billion) by fiscal 2028 for the expanded child-rearing assistance measures. Of the total, ¥1 trillion (about \$6.5 billion) will come from the support fund plan [12].” The annual expense may not appear to be a lot, whereas if added up, the total expense of the whole program is a considerable amount. In addition, the continuous subsidy over several decades did not seem to help the Japanese society, so the spending is likely to remain in the future.

The Japanese government has replaced the role of local community leaders in many rural areas, leading to the degradation of self-governance and community guidance. As a result, more aid from the government is required to help the rural communities. The pressure on the Japanese government adds up year by year due to the formation of this vicious cycle.

The annual growth rate of the Japanese economy has been fluctuating around 0% to 3% for about 20 years and has dropped down to negative value multiple times, reflecting a sluggish growth of the economy [13]. The stagnation of the economy, usually accompanied by the slow growth of government revenue, leads to the inability to proceed with the subsidies.

### 3.3. Debate on Rural Depopulation's Effect

There are two main theories regarding rural depopulation and out-migration. Based on neo-classical economics, the first theory holds that rural depopulation is, in fact, a process to reach a new balance in society [13]. The rural dwellers are moving away from the rural areas to prevent poverty and pursue economic well-being. Rural depopulation is a normal process that facilitates automatic resource reallocation. Consequently, the intervention of rural depopulation is unnecessary as it will only lead to resource misallocation.

Another theory believes that rural depopulation is abnormal. It is an imbalance that emerges during the process of economic development and urbanization, which is in need of change [13]. Some economic geographers believe that the collapse of the regional industry, led by agriculture, is the reason for the rural depopulation [13]. The collapse of rural industry and the rise of the urban economy cause imbalance and inequality in society.

Does the rural depopulation signify the future of cities, or is it calling for changes in society?

## 4. Suggestions

Based on the issues suggested in the previous part, the author proposes three solutions to the depopulation of the nation and the rural areas. These suggestions may help with rural depopulation while avoiding the existing issues in Japan's policies and adjusting to China's current level of development.

### 4.1. The Needed Rural Areas

China's huge population base and limited urban capacities result in the need for rural areas. Despite people's eagerness to move to cities for opportunities, a large proportion of the Chinese population cannot be held in cities. China's considerable need for food and emphasis on food security led to the existence of rural areas and agricultural fields, and they will continue to exist in the future. Although immigration to cities is still the general trend in China, and serious depopulation has happened in many villages, rural residents and the workforce will continue to take up a great part of the Chinese population. The villages need to have residents, and agriculture requires labor.

Hence, because of the importance of rural areas for China's future development, this paper considers the rural depopulation in China to be an implication of the imbalance in its development.

The long-run development and sustainability of the rural areas demand a sufficient and even steadily increasing rural population. Similarly, the sustainable development of China also requires steady population growth, which means the current trend of low population and even negative population needs to be reversed.

## 4.2. Rural Revitalization

The main issue with Japan's rural revitalization policy is that the excessive subsidy and help from the central and local governments have replaced the grassroots leadership in the rural areas, which leads to over-dependence on the central government and financial pressure. To ensure population growth and the long-term growth of rural areas, rural revitalization is necessary. The Chinese government needs to introduce a more suited policy and learn from the Japanese experience.

Nowadays, most rural industries are owned by the government or the village leadership. The few private industries are the small-scale Bed and Breakfast hotels in the rural areas. The number of job opportunities and boosts in the economy provided by the private sector in rural areas is very limited. The Chinese government was starting to promote various industries, such as tourism, fishery, or flower planting, based on the villages' characteristics to revitalize the economic growth. State-owned firms are inevitable at the beginning of the revitalization as few individuals have the will or resources to start a rural firm. To sustain and further economic growth without stressing the government budget, the gradual privatization of the rural industries needs to be done. After a solid foundation for the rural economy, privatization and deregulation can ensure an energetic and diversified rural economy.

Additionally, the construction of the featured country lifestyle is important for the attraction of youths. Most youths prefer the cities thanks to their various recreational activities and convenient lifestyle. Due to geographical restrictions, it is hard to provide equal convenience in rural areas, so the villages need to create a lifestyle that is different but equally attractive and, most importantly, suitable for the rural areas. A tranquil and natural lifestyle with a unique human touch can attract a group of young people. Infrastructures, community building, and recreational facilities can make up for the lack of quality of life in rural areas. Government spending on rural revitalization is inevitable, which makes it important to allocate the budget efficiently.

## 4.3. Immigration

Population growth can be affected by two factors. Besides the birth rate, which Japan and China both struggled to keep high, immigration can also sustain high population growth, filling in the gaps of newborns.

Many European countries have countered with low fertility rates through the acceptance of immigrants. Spain, with the second lowest fertility rate in Europe, had a fertility rate of 1.16 births per woman, much lower than the 2.1 at which the current population can be maintained [14]. Yet, the country has a welcoming attitude to foreigners and offers the best quality of life to expats. Due to its relatively friendly immigration policy and ideal lifestyle, Spain received 1.3 million immigrants in 2022 [15]. The immigrants filled up the lack of workforce and managed to keep the population growth rate at 0.8% in 2022 [16]. This phenomenon has been a normality in many European countries, including Spain, for years. In 2024, foreign-born residents made up 18.31% of the population in Spain [17].

Based on the experience of European countries, immigration can be an effective policy for low fertility rates and low population growth at a relatively low cost for the government. Nonetheless, Japan took a relatively strict immigration policy and gave up the benefits of immigration due to historical isolation, the protection of its traditional culture, and the maintenance of national and ethnic pride. Although the immigration policy has recently loosened, the ideas and habits formed in history

cannot be changed as fast. Likewise, China has always taken a conservative standing on immigration due to similar concerns as Japan, and China even implements a tighter immigration policy: unless they are children of Chinese nationals, foreign-born people cannot attain Chinese citizenship.

Being a country with a long history, a deep culture, and unified ethnicities, China has an understandable wish to lower the uncertainty of adding more ethnicities and cultures into the country and preserving the traditional culture. At the same time, Japan's experience indicated that the anti-immigration policy may not be the most effective as Japan finally decided to open up after a long history of isolation. Hence, China may consider starting to open up the immigration policy a little to observe its effect.

A decreasing national population cannot support the population and economic growth of the rural areas. Immigration can continue the population growth even with the current low fertility rate in China. A younger, more diverse, and larger population can reduce the pressure of the population attraction to rural areas and accelerate the propulsion of rural development, helping to reach rural revitalization's main goals.

## 5. Conclusion

China and Japan have similar development paths in the past and are now facing the same problem. The young generation is migrating to cities from villages to look for more opportunities, leaving rural areas socially dysfunctional and economically depressed. The Japanese government has introduced a rural revitalization policy and subsidy for newborns, whereas the ineffectiveness of the policy and the financial burden have reflected the major defects of the policy. Despite the debate on the necessity of interfering with the rural out-migration trend, rural population growth and rural revitalization are still critical for China's future development. Hence, to foster China's development, rural depopulation and the drop in population nationwide have to stop. A rural revitalization strategy involving the initiation of industries, privatization of firms, and construction of lifestyles can mitigate rural depopulation and avoid the setbacks of the Japanese rural revitalization policies. Besides, immigration, although challenging the social stability and cultural inclusiveness of the country, may still be a worthy attempt for China as it is both effective and relatively low in cost.

Low fertility rates and population growth are prevailing issues in the world and can seriously affect the long-run growth of a country, especially in developing countries like China. Population growth, being a vital fuel for economic growth, if kept low, can create a serious shock to China's future rural development and national economic development. Japan has various similarities with China and has been facing similar problems for decades. In the hope of gaining some experience of low population growth and finding the best solution for China with the least effort, this paper focuses on Japan's past policies, their effectiveness, and their possible implication for China. From Japan's experience, this paper concludes the future development path for China in terms of population and the potential solutions for the country.

Even though China and Japan share multiple similarities, China is facing a very unique problem in the history of the world. Although most countries faced rural depopulation during the fast economic growth, few countries began to face low fertility rates at such an early stage. China is now facing a combination of rural depopulation and nationwide low population growth at the developing stage of the country, which adds a lot of subtlety to the problem and may lower the value of implication of Japan for China. To better understand the situation in China, targeted research on China's current situation and rural development is irreplaceable. On-field research in rural China and surveys of Chinese youths can help learn the ideas of the young generations and find the future development path.

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