

Research on the Urban-Rural Differentiation and Equalization Path of Basic Environmental Public Service Supply

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Abstract: The prominent problem of the urban environment tending to improve and the rural environment continuing to deteriorate reflects the huge differentiation in the supply of basic environmental public services between urban and rural areas in China, which specifically manifests in environmental infrastructure, capital investment, institutions and staffing allocation. The main reasons for these incidents are the failure to correctly understand the problem of rural environmental protection, the dual structure of urban and rural areas, and the insufficient total amount of environmental protection investment. Therefore, it is necessary to innovate the environmental protection supply model, breakthrough the dual structure of urban and rural environmental protection investment, promote the integrated construction of urban and rural environmental protection, and ensure that urban and rural residents to enjoy the environment rights and interests with justice.

Keywords: Basic public service of environment; Supply; Urban-rural differentiation; Equalization

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1. Introduction

1.1. Urban-rural differentiation of basic public service supply of environment

The provision of basic public services of environment refers to a systematic arrangement in which the government provides all citizens equally and evenly shares basic public services environment supplies ^[1]. The formulation of environmental public policies must be based on the respect for human rights, fairness and justice. At the same time when distributing environmental risks fairly, give all the public the equal right to enjoy basic environmental public services, regardless of differentiation of region, ethnicity, gender, income and status ^[2].

Scholars' current research on basic environmental public services focuses on the following aspects: First, research on the efficiency and effectiveness of fundamental environmental public services ^[3, 4]. The second is how to develop relevant research on China's challenge of equalizing access to basic environmental public services ^[5, 6]. However, there is still a dearth of practical observations and in-depth debates on the real nature of the study on the equality of the supply of basic public services in the urban and rural environments. Therefore, based on the description of the actual differentiation in the supply of basic public services in the urban and rural environment, the analysis of the subjective and objective causes of this problem, and the proposal of targeted solutions, have become the main themes of this article.

1.2. Urban-rural differentiation in environmental infrastructure

It has been repeatedly emphasized that the issue of rural environmental improvement should be carried out in both developed and underdeveloped regions. The standards can be high or low, but at least a clean and tidy living environment should be provided for farmers. A clean and tidy living environment is inseparable from the support of environmental infrastructure. **Table 1** compares the number of urban and rural environmental infrastructure in China in 2019 (Data source: *China Urban and Rural Construction Statistical Yearbook 2019*).

	Length of drainage pipe	Per capita green area of	Special sanitation vehicle	Public toilets
	(10,000 km)	park (square meters)	equipment (10,000 units)	(10,000 units)
Urban	74.4	14.36	28.1558	15.3426
Rural	18.8	2.7	21.1	12.9

Table 1. Comparison table of Urban and Rural Environmental Infrastructure in China in 2018

As the balance of environmental protection funds tilts towards the urban end, the coverage of rural environmental infrastructure is much lower than that of urban areas. In addition, some local governments do not pay enough attention to environmental protection in rural areas, and the effective implementation of environmental protection policies and measures, resulting in poor results. Many rural areas are still in a state of garbage blowing by wind, sewage relying on evaporation, and the rural ecosystem having been severely damaged, causing great harm to the living environment and physical and mental health of rural residents.

1.3. Urban-rural differentiation in investment in environmental protection funds

Investment in urban environmental infrastructure accounts for the vast majority of China's investment in environmental pollution control, which has remained at about 60% in recent years. Urban environmental infrastructure investment is a carrier for the government to provide citizens with basic environmental public services, which have popularized advantages for both urban and rural areas ^[7].



Figure 1. The amount of investment in rural municipal public facilities and the amount of urban environmental infrastructure investment in China from 2007 to 2017.

Figure 1 shows the comparison between the amount of investment in rural municipal public facilities and the amount of urban environmental infrastructure investment in China from 2007 to 2017 (Data source: China Environmental Statistics Yearbook 2018). It can be seen from the figure that the overall investment in the construction of municipal public facilities in rural areas is even less than half of the investment in urban environmental infrastructure construction that is only used for environmental protection projects, not to mention the investment of rural environmental infrastructure construction.

1.4. Urban-rural differentiation of environmental protection agencies and personnel

China's rural environmental governance chain is always broken at the "last mile". One of the important reasons is the weakness of grassroots environmental protection forces, especially the absence of environmental protection agencies in towns and villages ^[8]. In 2015, there are 2,896 environmental protection agencies in towns and villages in China, which are less than 20% of the national agencies in total, and the personnel engaged in full-time environmental protection agencies are the forefront of environmental protection work carried out by the ecological environment department at the grassroots level. From the current point of view, the effectiveness of this role is obviously unable to meet the needs of ecological civilization construction. (Data source: *China Environment Yearbook 2016*, *China Statistical Yearbook 2016*)

2. The main reasons for the differentiation in the supply of basic public services of the urban and rural environment

2.1. Lack of a correct understanding of rural environmental protection issues

The lack of a correct understanding of rural environmental protection issues is the root cause of the differentiation in the supply of basic public services for the urban and rural environment. The central government has repeatedly emphasized the importance of balance, full development, and equalized supply of basic public services. However, from the local level, rural environmental protection issues are often ignored, and the current environmental protection work pays little attention to the differentiation between urban and rural environmental protection, and lacks in the overall understanding of environmental issues. In addition, few local governments have issued accordingly specific and targeted environmental protection policies and regulations and quality implementation supervision standards considering the actual conditions of regional development planning, industrial layout, pollution status, environmental protection goals, which directly influence the effect of environmental supervision and pollution governance.

2.2. Limitations of the urban-rural dual structure

The development concept of "cities first and countryside second" makes the urban areas be prior to enjoy the various dividends brought by the reform. The city has a solid economic foundation, so it has greater motivation to create a good living environment. However, on the contrary, when we look at the rural areas, though they have solved the basic problem of food and clothing, there is still a large gap of income, material living conditions, etc. between rural residents and citizens, in the face of the same social competition, the pressure for rural residents to survive and develop is obviously greater, so economic development and material conditions have become the main pursuit of rural residents. Rather, the rural environment is the link being ignored currently, and there are even emerging the usual acts of sacrificing the environment in exchange for economic development.

2.3. The total amount of investment for environmental protection is insufficient

The government needs a lot of funds to provide basic environmental public services as a guarantee. Judging from the financial situation and changes in the scale of environmental protection investment in recent years, China's fiscal revenue has maintained a high-speed and stable growth. However, the proportion of environmental protection funds is relatively small, and there is a continuous downward trend, which shows that the government's new financial resources every year are not inclined to the field of environmental protection. The proportion of environmental protection investment in fiscal expenditure also showed a downward trend, which was small. With the fast development of economic society, it must sacrifice partial environment as a premise. There are new issues when the old ones have not been solved yet, and the gap of the investment of the environmental protection, the government will inevitably be unable to meet the overall demands when providing basic environmental public services, and can only shift environmental protection resources to urban areas with relatively concentrated population and relatively serious environmental pollution at the expense of ignoring rural environmental problems.

3. The path to achieve equalization of the supply of basic public services for the urban and rural environment

3.1. Implement the main responsibility of supply

On one hand, local governments should take the initiative to reduce or avoid the pollution of rural areas by urban development, cultivate green industries, and develop a circular economy. While alleviating the pressure on environmental resources, we will increase the added value of agricultural production activities, so as to step on the road of green development with low resource costs, development potential, and coordination between urban and rural areas.

On the other hand, local governments should actively develop rural green productive forces, and on the basis of economic development, obtain economic status equivalent to that of cities. Local governments should actively guide peasants to use all kinds of agricultural products in a scientific, rational, and efficient manner in the process of agricultural production activities, establish a strict management system for agricultural product standards, and avoid the behavior of developing the agricultural economy at the expense of sacrificing the environment.

3.2. Expand the scale of investment in environmental protection

The central and local governments at all levels should judge the situation, timely contain the environmental protection into the basic people's livelihood of China, and give key support and guarantee when making overall fiscal arrangements. On the basis of well consolidating the governance achievements of environmental pollution in urban areas, the focus of environmental protection work will be shifted downwards, and further support will be increased in the field of basic environmental public services in rural areas, including funds, policies, technology, and talents, conduct the overall governance of the whole village for the rural environment issues, taking the improvement of the living environment as the primary link of rural pollution governance. Well implement the initiatives and policies of "Industry feeds back to the agriculture, cities support the villages," encourage and guide the extension of urban high-quality environmental basic public services to rural areas, and promote rural areas to share urban high-quality environmental public service resources.

3.3. Innovate and optimize the supply model

In order to fully solve the problem of rural environmental pollution, while expanding the central financial

allocation, it is also necessary to mobilize the enthusiasm of local governments for environmental protection, perform the function of local finance, rationally allocate the proportion of finances at the provincial, municipal and county levels for basic rural environmental public services. In addition, in the process of constructing the system of environmental protection investment, it is necessary to actively explore the cooperation model of promoting the government and social capital, and encourage and guide social forces, enterprises, social organizations, etc. to participate in the process of providing basic public services for the urban and rural environment, give proper support on the aspect of personnel, finances and materials. Fully activate the participation enthusiasm of social forces to achieve mutual benefits and win-win and effective supply of basic public services for the urban and rural environment.

4. Conclusion

At present, the differentiation of the supply of basic environmental public services between urban and rural areas will inevitably affect the overall process of China's ecological civilization construction. We must adhere to the environmental governance concept of "co-governance, co-construction and sharing" in urban and rural areas, and pay attention to the systematic, integrated and coordinated nature of ecological protection, and must find out the gap between urban and rural environmental pollution governance and breakthrough the limitations of the dual structure of urban and rural areas, take the overall construction of urban and rural environmental protection and the balancing supply of the basic public service in urban and rural environmental protection work, and ultimately realize the modernization of urban and rural environmental governance.

Disclosure statement

The authors declare no conflict of interest.

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