

DEVELOPMENT OF WASTE MANAGEMENT PROBLEMATIC IN CHINESE SCIENCE

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The report presents a literature review of Chinese economists on the problem of municipal solid waste management.

Keywords: economic policy; municipal solid waste; management; China.

РАЗВИТИЕ ПРОБЛЕМАТИКИ УПРАВЛЕНИЯ ОТХОДАМИ В КИТАЙСКОЙ НАУКЕ

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В докладе представлен обзор литературы китайских экономистов-теоретиков по проблеме управления твердыми коммунальными отходами.

Ключевые слова: экономическая политика; твердые коммунальные отходы; управление; Китай.

Conducting scientific and systematic research of the solid waste processing industry policy during the transition period of China's economy is of great importance to promote the development of the solid waste processing industry towards a new norm of high standards, strict supervision, public participation and result orientation. Domestic scientists have conducted a lot of research on the development and implementation of waste management policy.

Chen Zeya analyzed the Nanjing waste management policy in the form of questionnaires and believes that the current Nanjing waste management policy is a symbolic and unworkable policy [1].

Shen Shao analyzed and analyzed our country's waste management policy and found that our country's waste management policy has unstable standards

and insufficient information basis for incentive policy, and proposed supporting solutions [2].

Wu Yu conducted a reflexive analysis of the previous policy of our country in the field of waste management and put forward targeted ideas for improvement [3].

Li Anoxia cited Taiyuan City as an example, analyzed the implementation of waste management policies and problems, and proposed solutions such as providing guarantees for the policy, developing standards for charging for household waste management, and improving the legal system for urban waste management [4].

Xuan Lanolin analyzed the current situation with the implementation of waste management in Shanghai, analyzed policy issues and proposed appropriate measures to improve [5].

Luo Kingship used extensive field research methods to study the results achieved and identified problems since the introduction of waste management policy in Guangzhou and gave suggestions for improvement [6].

Ma Jinni conducted a comprehensive analysis of Beijing's domestic waste management policy in terms of five interrelated aspects and proposed three factors that could influence the policy effect [7].

Liu Man compared the impact of two price mechanisms of charging by volume and recycling subsidies in waste management on the incentive effect of waste management. The study concluded that the method of collecting subsidies for recycling is more suitable for the current national conditions, and the method of charging by volume is the future development of the trend of the price mechanism of waste management [8].

Wang Jing qi divided the cities of our country into the first, second and third lines, calculated and scientifically analyzed the total cost of urban waste management and total social income, analyzed the impact of the policy of charging for waste management on management efficiency and provided a reference basis for the development of subsequent waste management. charging systems [9].

Liang Yugan analyzed the impact of the household waste collection system on the behavior of residents, and the results showed that the collection policy can significantly reduce garbage emissions, promote garbage recycling and have a good effect of reducing the amount of garbage [10].

Cao Na based on environmental economics and investment theory, conducted a study on the collection of fees for the disposal of municipal solid waste. The study established a model for charging for waste disposal in accordance with national conditions and provided a reference basis for the full implementation of the system of charging in the case of waste management and waste recycling in our country [11].

Shao Yanbu studied the relevant policy of subsidizing household waste management in Heilongjiang Province, discussed problems in implementing the policy of subsidizing waste management and gave an optimization strategy [12].

Wu Jianzhong and others studied the implementation of the Shanghai Green Account waste management system using population surveys and data access. Due to the low enthusiasm of residents and high pressure on capital expenditures in promoting waste management, they proposed to adjust the method of subsidizing cleaners, improve the relevance of points, strengthen the development of green account platforms and create points and consumer associations to continuously promote the creation of a green account system and the implementation of waste management policies [13].

Huang Wenfang and others studied the relevant waste management incentive policy in Shanghai. The results showed that the current incentive policy has such problems as serious economic incentives and light administrative coercion, serious material incentives and light spiritual incentives, and proposed to adopt legislation that promotes the formation of a new way of waste management based on mandatory waste management and supplemented with economic incentives [14].

Sun Yueyang and others assessed the social costs of municipal household waste management in Beijing, and the results showed that household waste management can reduce the social costs of the entire municipal household waste management process [15].

In recent years, with the continuous growth of China's population and urbanization, the production of household waste in our country has continued to grow, the problem of garbage siege has become more noticeable, and the demand for garbage disposal has become more active. From 2011 to 2021, the total population of our country increased from 1.347 billion to 1.395 billion, and the urban population increased from 6. The population of 9.1 billion people increased to 831 million, and the level of urbanization of the population increased from 51.27 % to 59.58 %. Population growth and urbanization rates have led to an increase in the total amount of household waste and municipal waste.

It can be predicted that there is still a large gap between the pace of urbanization in China and developed Western countries. In the future, with the further increase in the rate of urbanization of China, the amount of solid household waste generated will increase even more. According to the relevant statistics of the National Bureau of Statistics, from 2007 to 2021, the volume of solid waste removal in China increased from year to year, from 152.15 million tons in 2007 to 228.02 million tons in 2021, the cumulative annual growth rate was 3.75 %, and the growth trend is very stable. In the future, as the urbanization process in China continues, rural areas and the population of the county seat will continue to flock to the city, and the concentration of urban population will increase even more. It is expected that the volume of solid waste removal in our

country will continue to grow for a long time in the future. In this situation new studies and economic policy measures are of a great importance.

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