

From Policy to Practice: Historical Experience, Difficulty Avoidance and Governance Strategy of Waste Classification Policy in the New Era

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Abstract: In recent years, garbage classification has become one of the focuses of global attention. China has gradually incorporated garbage classification into systematic and systematic construction and promulgated relevant policies. At present, it is in the stage of large-scale pilot work. This study combines empirical research, theoretical research and historical comparative research, and collects relevant data of garbage classification policies at home and abroad in recent 10 years for analysis. The main findings of this study are as follows: the central government gradually refines the classification criteria in the process of policy implementation, and different cities try to implement the garbage classification policy according to local conditions. Domestic and foreign garbage classification policies have their own national characteristics. The research uses the waste classification policy to promote the demonstration model to analyze the operation of China's waste classification policy, and proposes the following suggestions: Promote policy promotion and strengthen urban pilot projects; focus on the source of garbage and innovate incentive mechanisms; coordinate policy links to enhance citizen awareness.

1. Introduction

In the process of globalization, waste sorting has always been the focus of attention of all countries, and it has attracted more and more attention on a global scale. Since the beginning of the last century, a few countries such as Japan, Germany, and Sweden have successively promulgated waste separation policies (such as the Waste Disposal Law promulgated by Japan in 1970 and the Packaging Regulations issued by Germany in 1991) to ensure that waste can be effectively recycled. In recent years, with the transformation and development of the economies of various countries, the phenomenon of “garbage besieged city” has caused tremendous pressure on the environment and seriously threatened the survival of mankind. The implementation of garbage classification policy in China is in its infancy, and more than 10 relevant laws and policies have been promulgated by relevant state departments. And in some large and medium-sized cities for the pilot work of waste classification, the next step need to carry out further investigation from the policy itself and practice. In the long run, the implementation of garbage classification policy can effectively save resources and recycle them, thus promoting energy conservation and emission reduction, protecting the ecological environment, and making people live in harmony with nature, which is conducive to the early realization of the goal of beautiful China in 2035.

2. Literature Review

Since the 1950s, there have been more and more studies on garbage classification policy, mainly in the fields of management, politics, psychology and other disciplines. At present, waste sorting is implemented only in a few countries, and it has not attracted attention in countries all over the world. The classification of waste from theory to practice still needs to go through a process. This paper summarizes the relevant research on the existing waste classification policy, and analyzes it as follows:

In terms of research methods, many studies have used empirical research methods to explore the influencing factors of waste classification implementation and case studies on foreign policy,

lacking theoretical research and historical comparative research. Research on the historical experience of waste sorting policies and dilemma avoidance is also quite scarce. For example, Xu Lin, Ling Xiaoliang and Lu Yujie (2017) used questionnaires to explore the influencing factors of urban household waste classification in HZ [1]. Chen Xiaoyun and Zhang Tingting (2015) used the observation method to investigate the distribution of 104 community wastes in Guangzhou and the participation of residents [2]. Liu Mei (2011) introduced the methods of garbage classification in Japan, the United States, Germany, and Belgium by collecting different literatures on the classification of Chinese and foreign wastes [3]. Zhang Nongke (2017) explained the three stages of garbage classification in China and the problems in concept, management system, operation system and regulation system by comparing the garbage classification policies at home and abroad [4]. It can be seen that the relevant research only makes descriptive analysis on the status quo of garbage classification at home and abroad, but does not rise to a certain theoretical level.

From the point of view of research theory, there are few studies from the perspectives of management, politics and psychology, and few from the perspectives of history and sociology. For example, Xue Liqiang and Fan Wenyu (2017) summarized and commented on the current theory of municipal solid waste management in China from the perspective of public management [5]. From the perspective of collective action theory, Zhang Liping and Zhang Zhonghua (2016) analyzed the dilemma faced by the source classification of municipal solid waste in China [6]. From the perspective of environmental psychology, Lu Xianfeng (2013) analyzed the internal factors such as personal habits, environmental awareness, “economic man” rationality and the influence of external factors such as legal system, department management, publicity and education on the classification behavior of household waste [7]. Different perspectives can only represent some aspects of the waste separation policy in a certain field, and the results are more unilateral. Therefore, the analysis theory of spam policy still has certain limitations, and it needs to be theoretically analyzed from a multidisciplinary perspective.

In terms of research content, most of the existing researches are from the status quo of garbage classification, the implementation of policies and the factors affecting the correct classification of residents. For example, Deng Jun, Xu Yuying, and Zhou Chuanbin (2013) explored the key factors affecting residents' proper placement of garbage and the impact of garbage classification awareness rate on residents' correct delivery rate [8]. Chen Lanfang et al. (2012) argued that there is a lack of research on rational classification of garbage, spatial attributes of recycling behavior, recycling behavior, time and cost of recycling in China [9]. Liao Rujun, Huang Jianzhong and Yang Danrong (2012) also summarized the status of domestic waste classification and listed the status of foreign waste classification [10]. At present, the research angle of garbage classification policy is too limited. The existing research on garbage classification policy still remains in the analysis of the status quo, and the mechanism behind the implementation of the policy needs to be further explored.

From the research findings, the existing research mainly focuses on how to promote the classification of garbage and the influencing factors of garbage classification. Ye Lan and Chen Qixing (2017) believe that garbage disposal system can be developed from five aspects: building a multi-level incentive and restraint mechanism, improving the clearance mechanism, improving the garbage disposal system, promoting recycling and improving the accuracy of classification awareness [11]. Lu Weixia and Dujuan (2016) put forward that propaganda and education, sound legal system, long-term incentive and restraint mechanism and multi-subject participation are the core of garbage classification policy [12]. Tian Huawen (2015) believes that China's waste management policy will be improved in five aspects: incentive policies, regulatory measures, family and corporate responsibilities, education and public propaganda, and incentive measures [13]. Most of the existing researches on the classification of waste separation policy are mainly in the discussion of influencing factors and policy analysis, indicating that the implementation of the current waste classification policy in China can be changed and adjusted from these aspects.

In general, the problems related to waste sorting have gradually attracted attention on a global scale. At present, the relevant research fields on waste sorting policies are still not mature, and

scholars need to conduct research from different angles.

3. Research methods

This study will use a combination of empirical research and theoretical research, and historical analysis of existing data. First of all, this study sorts out and compares relevant policies at home and abroad. First, we will explore the process, effects and dilemmas of policy implementation by comparing the waste classification policies of different cities in China. Then analyze the experience and shortcomings in the implementation of foreign typical national policies. Finally, the Chinese and foreign waste classification policies are compared from the implementation stage, implementation path and implementation characteristics. Secondly, this study uses existing theoretical models to analyze the problems arising from the implementation of garbage classification policy, and then establishes a new analytical framework to explain them. Finally, some countermeasures and suggestions are put forward to solve the problems that may arise during the implementation of garbage classification policy in China.

This research data mainly comes from three aspects: domestic waste classification policy, typical foreign waste classification policy and relevant news search. China's garbage classification policy mainly comes from the official websites of the State Council, the Central People's Government, the Central Ministry of Housing and Construction, the Shanghai Municipal People's Government, the Beijing Municipal Administration Committee and the Beijing Municipal People's Government from 2011 to 2019. The emphasis of garbage classification policy in different periods is mainly counted. The data collection time is from July 13, 2019 to July 20, 2019. For the foreign waste classification policy, this study selected the typical German and Japanese, and collected the waste separation policy and related bills from 1970 to 2016 from the existing research literature and Baidu academic. It mainly counts the evolution of waste sorting policies in various countries. The data collection time is from July 13, 2019 to July 20, 2019. The news related to the waste sorting policy mainly comes from Xinhuanet, People's Daily and Fenghuang. It collects the implementation of the waste sorting policy in China from November 10, 2018 to July 23, 2019. The data collection time is 2019. July 23 to July 24, 2019.

After analyzing the existing research and related data, the author further puts forward the predicament of the current garbage classification policy and puts forward some ideas for related problems, and gives countermeasures.

4. Historical experience

4.1. Domestic policy

4.1.1. Central policy

China also pays great attention to the construction of ecological civilization in the process of economic development. Therefore, garbage classification has received great attention in China. In the past ten years, China has successively issued relevant documents on garbage classification, which means that China has gradually incorporated waste classification into the standardized management system.

Table 1 Series Central Policy on Garbage Classification

The file name	The year	The promulgated unit	The file contents
Opinions on further strengthening the disposal of municipal solid waste	April 25, 2011	The state council	We should make the disposal of urban household garbage harmless by the source reduction, garbage classification, resource utilization, strengthening planning guidance, improving the collection and transportation network, selecting appropriate technology, accelerating the construction of facilities, improving the level of

			operation and other aspects.
Opinions of The General Office and the State Council on the establishment of a complete and advanced waste commodity recycling system	November 4, 2011	The state council	China's waste commodity recycling system is not perfect, which affects waste utilization and causes environmental pollution. We should improve the recycling system, strengthen the support of science and technology, play a leading role of large enterprises, and strengthen supervision.
A circular issued by The State Council on the issuance of the national 12th five-year plan for environmental protection	December 10, 2011	The state council	To promote the safe treatment and disposal of solid waste, we should strengthen the prevention and control of pollution from hazardous waste, intensify the prevention and control of pollution from industrial solid waste, and improve the treatment level of household waste.
“Twelfth five-year” national urban solid waste harmless treatment facilities construction plan notice issued by The General Office of the State Council	May 5, 2012	The state council	We will promote the harmless treatment of domestic garbage in cities and towns across the country, use incineration treatment methods, adhere to the combination of centralized treatment and decentralized treatment, accelerate the construction of facilities, improve the collection and transfer system, and promote garbage classification.
Opinions of the State Council on strengthening urban infrastructure construction	September 13, 2013	The state council	Focusing on large and medium-sized cities, demonstration projects will be built in demonstration cities (districts) for the classification of household waste and demonstration projects for the treatment of household waste stock, so as to ensure the standardized operation of garbage treatment facilities, prevent secondary pollution and get rid of the dilemma of “besieged cities with garbage”.
Notice of the State Council on printing and distributing the 13th five-year plan for energy conservation and emission reduction	January 5, 2017	The state council	We will strengthen the standardized and orderly disposal of urban waste.
Notice of The General Office of the State Council on forwarding the implementation plan of the household waste classification system of the Ministry of Housing and Urban-Rural Development of the National Development and Reform Commission	March 30, 2017	National development committee Ministry of Housing and Urban-Rural Development	Waste can be divided into hazardous waste, recyclable waste and perishable waste. Relevant collection and transportation system, recycling system and terminal treatment should be established.
Notice of The General Office of the State Council on printing and distributing the	July 27, 2017	The state council	We will prohibit the import of solid waste that is hazardous to the environment and has a strong public response, gradually and orderly reduce the types and quantities of solid waste to be imported,

implementation plan for the reform of the management system of the import of solid waste by prohibiting the entry of foreign garbage			and raise the threshold for the import of solid waste.
Notice of the Ministry of Housing and Urban-Rural Development on accelerating the classification of household waste in some key cities	January 2, 2018	Ministry of Housing and Urban-Rural Development, PRC	We will establish a comprehensive system for classifying urban household waste in 46 key cities, standardize its distribution, collect it, and speed up classified transportation.
Opinions of the CPC Central Committee and the State Council on comprehensively strengthening ecological and environmental protection and resolutely combating pollution prevention and control	June 24, 2018	The state council	We will accelerate the separation of waste and strengthen the prevention and control of solid waste pollution.
Notice of the Ministry of Housing and Urban-Rural Development and other departments on comprehensively carrying out household waste classification in cities at and above the prefectural level nationwide	June 6, 2019	The Ministry of Housing and Urban-Rural Development	It is advocated to carry out household waste classification in cities at or above the prefectural level, and to classify garbage into hazardous garbage, recyclables, dry garbage, wet garbage, kitchen garbage and perishable garbage.

Since 2011, China has begun to pay attention to domestic waste classification, and adopted a policy to popularize waste classification throughout the country. From 2011 to 2012, relevant government units put forward systematic planning and conceptual conception for waste classification. It believes that China's waste classification should start from the source, establish a complete waste recycling system, and gradually promote the system recycling, secondary recycling and harmless treatment of waste. It can be seen that the classification of waste in China is gradually changing from fragmentation and randomization to systematization, scale and system construction.

From 2013 to 2017, China is more concerned about the systematic construction of the waste sorting policy, more specific classification measures appear, and urban pilots are implemented. Through the pilot, the developers can further modify the waste sorting policy according to the actual situation and prepare for its implementation nationwide. At the same time, the pilot policy has initially classified municipal solid waste according to certain standards, and began to consciously emphasize the standardized treatment of municipal waste, and classified municipal solid waste into several implementation processes to improve the quality of solid waste. At this stage, China tried to carry out the pilot work of garbage classification policy, so as to observe the implementation of the policy and whether further improvement is needed.

From 2018 to 2019, the garbage classification policy will be implemented in cities above

Prefecture level, and the new era of garbage classification with the participation of the whole people will come. The new garbage classification policy has formulated more detailed and specific classification rules. The garbage classification standards are divided into six categories: dry garbage, wet garbage, harmful garbage, recyclable garbage, kitchen garbage and perishable garbage from three categories: harmful garbage, recyclable garbage and perishable garbage. The classification process is more systematic and professional, which can effectively improve the garbage classification system and promote the process of garbage classification.

4.1.2. Typical Urban Policies in China

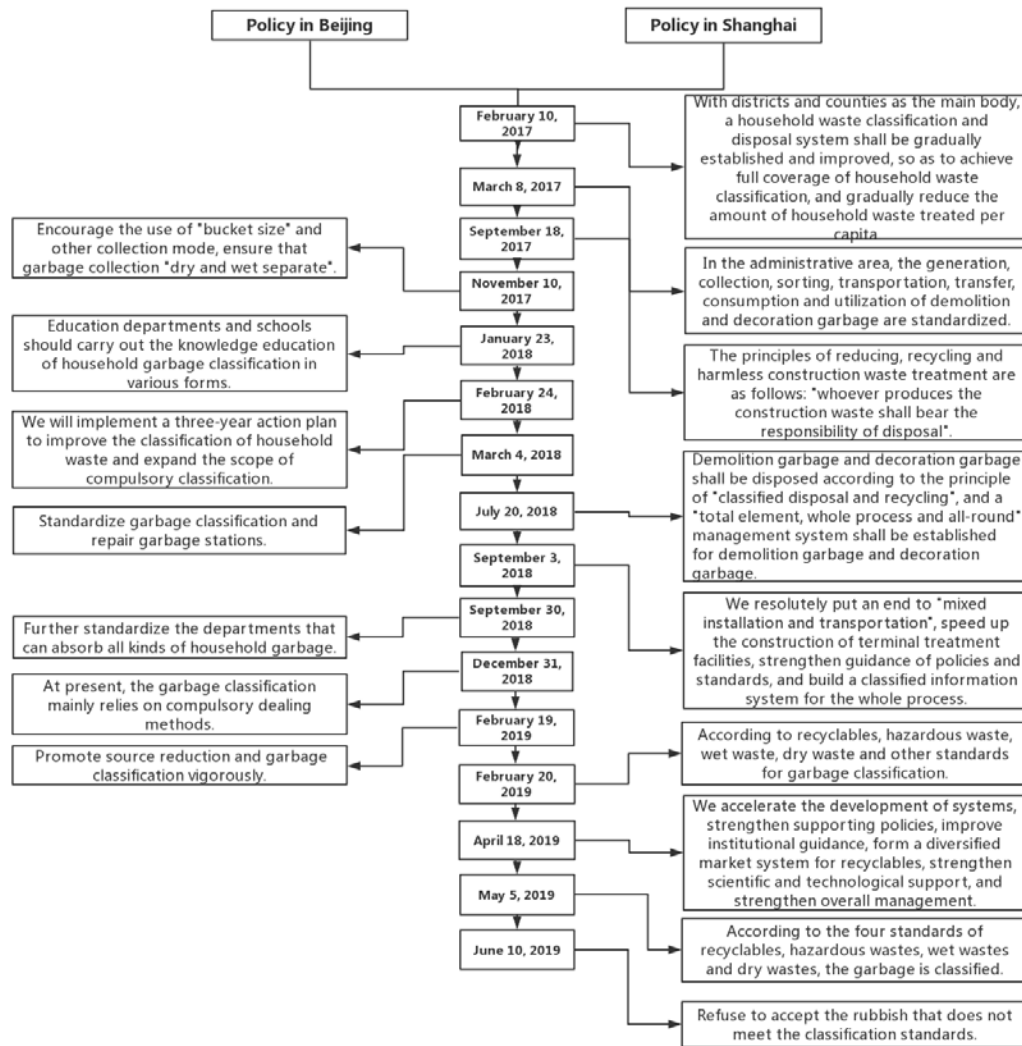


Fig. 1. Historical Evolution of Waste Classification Policies in Beijing and Shanghai

At present, China's garbage classification policy is being implemented in pilot projects in larger cities. In this paper, Shanghai and Beijing, which are more perfect and effective in the pilot process, are selected to explore the similarities and differences between them in the implementation of garbage classification.

(1) Similarities

In the process of implementing waste sorting, the two gradually improve the system construction of policies and promote the further application of policies in cities. Shanghai's waste sorting gradually improves the collection, classification, transportation, and processing of domestic waste, so that waste sorting is covered and scaled within the city. Beijing adopts the characteristic "big and small barrel" garbage collection mode, further standardizes the garbage treatment system, and implements the city's three-year garbage disposal plan. It can be seen that the policy system of

garbage classification is gradually improved in the process of urban implementation, and gradually changes according to the characteristics of the city to meet the requirements of urban development.

(2) Differences

From the point of view of the implementation method, the focus of the implementation of the two policies is slightly different. Shanghai pays more attention to the classified transportation of garbage, that is, the policies of different periods focus on the classification and recycling of domestic garbage, house demolition garbage, decoration garbage and construction garbage. In addition, it pays more attention to the refinement of the garbage classification system. Beijing pays attention to the implementation and propaganda of garbage classification and makes the policy popular through propaganda means. It can be seen that the implementation of garbage classification policy in different cities will be different, and the implementation effect needs to be considered.

According to the classification criteria, the two classifications have different names but similar execution processes. Shanghai classifies garbage as dry garbage, wet garbage, hazardous garbage and recyclables, while Beijing classifies garbage as kitchen waste, recyclables, hazardous garbage and other garbage. According to the two classification criteria, dry garbage is equivalent to other garbage, while wet garbage is equivalent to kitchen waste. It can be seen that although China's current garbage classification standards have subtle differences in different cities, they generally appear to be divided into four categories, and further detailed divisions may still be needed in the future.

From the perspective of the implementation process, the implementation methods adopted by the two are different. In the process of policy implementation, Shanghai promoted the public's treatment of garbage classification through sound waste classification, standardized management and intensified policy guidance. In the later stage, the classification consciousness of residents was regulated by rejecting incorrect classified garbage. Since year 2018, Beijing has adopted coercive measures to promote the classification of residents. Different approaches in the implementation of the policy may directly affect the implementation results and popularity of the policy.

4.2. Foreign policy

This paper selects Japan and Germany, which have a typical implementation of the waste separation policy, to interpret the process of garbage classification, thus providing constructive opinions for the implementation of China's waste classification policy.

Table 2 Evolution of Japan's Waste Classification Policy [14]

The file name	The year	The file contents
Waste disposal act	1970	Regulate the discharge and disposal of waste, protect the living environment and improve public health.
Renewable resources promotion act	1991	Promote the long-term use of products by consumers and the use of renewable resources.
Law on promotion of classification collection and re-commercialization of container packaging	1995	Promote packaging classification and recycling of related materials.
Household appliances recycling act	1998	According to the recycling level of household appliances in Japan, the waste electrical appliances of different materials are recycled.
Basic law on promoting a circular society	2000	Promote proper recycling of recyclable products and proper disposal of non-recyclable products.
Promoting the efficient use of resources act, Solid waste management and public cleanliness act, Promotion of classification and recycling of containers and packaging act, Building and materials recycling act, Food recycling act, Automobile recycling act, Waste disposal act, Green procurement act	2001	According to the nature of various products to develop targeted classification methods.
Garbage classification collection methods and identification, Terminology for garbage classification collection, Statistics and evaluation index of garbage classification collection	2001	Form systematic garbage classification terminology.

Table 3 Evolution of German waste sorting policy [15]

The file name	The year	The file contents
Waste disposal act	1972	Promote the garbage from disorderly stacking gradually to centralized treatment.
Waste restriction and disposal act	1986	Make avoidance of waste generation the primary objective of waste management.
Packaging ordinance	1991	It is mandatory for manufacturers and distributors to be fully responsible for their product packaging.
Circular economy and waste act	1994	In order to keep more material information in the production circle, the idea of circular economy of closed-circuit circulation of resources is promoted to all production departments from packaging.
Electronic and electrical equipment sales management, recycling and harmless disposal act	2005	It requires the producer to be responsible for the entire life cycle of the product, responsible for the collection, recycling and disposal of the waste product, and pay for the costs of the whole process.
A new act on electrical recycling	2016	Electrical retailers are obliged to provide free recycling services.

First of all, the implementation of the waste separation policy of the two countries has undergone a long period of development. Japan has experienced a gradual improvement of the garbage classification policy for about 31 years, and Germany has spent about 44 years to make the classification of wastes nationwide. Garbage classification needs long-term time and experience accumulation, and can not achieve significant results in the short term. It needs the common support and participation of citizens.

Secondly, in different stages of the implementation of garbage classification policy, the two countries implemented garbage classification from the whole to the subdivision. At the beginning of the implementation of the policy, Japan put the emphasis of waste classification on waste disposal, and planned the process of waste disposal and recycling. In the mid and late stages, Japan subdivides the recycled materials and promulgates specific regulations, including container packaging, solid waste, household appliances, construction and materials, food, automobiles and so on. In Germany, a similar approach was adopted. In the early stage, the overall planning of waste sorting was carried out, and packaging, electronic appliances and the like were specifically recycled in the later stage. It can be seen that the refinement of waste classification is an indispensable process in the later stage of policy implementation, and it also represents a phased effect of policy implementation.

4.3. Historical comparison of Chinese and foreign waste classification policies

China's waste policy is in the initial stage of development, while some foreign countries, especially Germany, Japan and other countries have relatively mature garbage policies. Under comparison, we can find the deficiencies in China's waste classification policy and provide constructive opinions for China's waste classification.

From the implementation stage, the domestic and international waste classification policy has its own stage, and the garbage policy in different periods reflects the degree of social progress. The premature development of advanced developed societies has led them to take the lead in post-industrial society and to focus more on environmental governance. Therefore, the relevant

policies for waste sorting have gradually changed from holistic to refined with the degree of industrialization. In contrast, China's special national conditions and development level determine that China's garbage classification policy is in its infancy, which is reflected in the fact that garbage classification is not yet refined. Different countries have different stages of garbage classification policies, but the global garbage classification will still undergo a transition from holistic classification to refined classification.

From the perspective of implementation path, the national conditions and cultures of different countries determine the differences in the implementation process. Most developed countries adopt the way of direct policy delivery and implementation to make the policy implemented nationwide. However, in the planning and implementation of waste policy, China often experiences policy communication from the central to the local and from the urban to the rural. Therefore, the implementation of waste classification in different countries has certain differences, and the complexity of the policy implementation process needs to be considered.

From the perspective of implementation characteristics, different countries have their national characteristics in the implementation of the waste classification policy. Some developed countries adopt the means of direct participation by the whole people in the process of policy implementation. For example, Japanese citizens have a strong public awareness. Therefore, the implementation and implementation of garbage classification policy tend to be nationwide, and in order to adapt to the national conditions, China often adopts the method of first pilot and then promotion.

5. Predicament Avoidance

The existing research on garbage classification policy has analyzed the implementation process of the policy from the perspective of policy network, planned behavior theory, collective action theory and value creation theory. This paper introduces two representative policy analysis research models, and combines existing research theories to establish new models, so as to propose countermeasures for the related issues of waste classification policy.

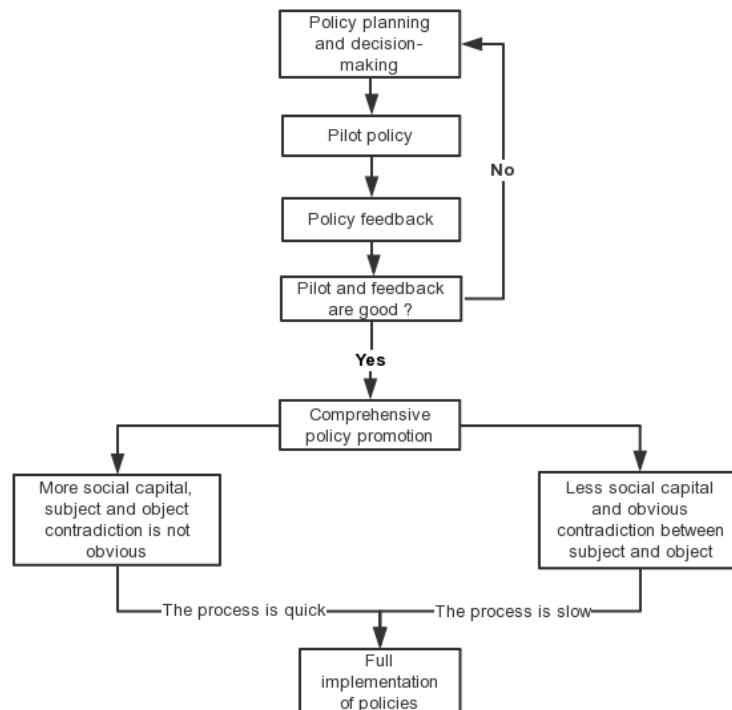


Fig. 2. Demonstration Model of Waste Classification Policy Promotion

American scholar Matland (1995) proposed a “fuzzy-conflict” model for the implementation of

policy, and believed that there are two important factors in the implementation of policy, namely, ambiguity and conflict [15]. Li Wenzhao (2018) proposed an analysis framework for the reform process in the whole process of comprehensively deepening reforms in China, and divided the process of reform into decision-making, collective choice, reform system/reform governance system, operational level selection, reform effect and evaluation criteria. The reform process is mainly divided into three categories, namely, the choice of policies, the implementation of policies, and the feedback process of policy implementation results. The three complement each other and form the whole process of reforming the system. The author combines the existing research perspectives and theories, and combines the national conditions with Chinese characteristics to build a new policy analysis model. In the process of policy promulgation and implementation, it will go through the process of planning, pilot, feedback, promotion and full implementation. Among them, the pilot project is an important process in China, which determines whether the policy can be successfully promoted and implemented. In the whole process, the degree of contradiction between the subject and object of policy implementation and the amount of social capital in different regions play a key role in the smooth implementation of the policy and the implementation time.

(1) Promoting Policy Promotion and Strengthening Urban Pilot Programs

Garbage classification policies are promulgated and implemented in different countries. The formulation and promotion of waste policy in developed countries adopt the method of policy formulation and promotion in the whole range of policy. Practice has proved that this method can be well implemented in other countries. However, China's waste classification policy is still in the initial stage of development. The special national conditions and different cultures make the pilot work as an important link before the implementation of the policy.

In response to China's special national conditions, the garbage classification policy should select the iconic cities for pilot work. China has taken the lead in selecting eight cities including Beijing and Shanghai for piloting in the preparation stage of the waste classification policy. In the second phase of policy implementation, 46 cities across the country were selected for further pilot promotion, expanding the scope of implementation of the waste separation policy and determining the nationalization of policies. Thus, the implementation of the pilot work in place can accelerate the “stable, accurate and ruthless” operation of China's policies in the whole range.

(2) Focusing on the source of garbage and innovating incentive mechanism

At present, the biggest problem in the pilot process of garbage classification is the classification of garbage sources. The frequency of random garbage sorting or evading garbage sorting in selected pilot plots is relatively high, for example, some households do not understand garbage sorting standards or refuse to use specific sorting bags, which seriously interferes with the promotion of the policy in the region.

In view of the problems in the pilot garbage policy, we can promote the garbage classification process and policy implementation through the services of community organizations in relevant regions. Community organizations can strengthen the residents' proper placement of garbage through relevant lectures and fixed time periods to assist community residents in the classification of garbage, and also enhance residents' recognition of policies. At the same time, appropriate points rewards can also increase the enthusiasm and participation of household waste classification.

(3) Coordinating policy links and enhancing citizen awareness

The biggest obstacle encountered in the implementation of China's waste classification policy is the negative support and misunderstanding of policy implementation objects for policy makers. Citizens need to invest time and energy to understand the new policy and practice through the pilot. Therefore, the introduction of the policy and the implementation process lasts for a long time and consumes social energy. Citizens have to undergo the dual transformation of psychology and practice in the process of policy implementation, so as to achieve the purpose of adapting to the new policy. In this process, some groups are often difficult to cooperate with the implementation of the policy because of the time-consuming, ineffective and other problems.

Therefore, citizens need to improve their sense of policy participation and public awareness. In this process, the state should pay attention to the citizens' response and attitude to the policy.

Through the establishment of policy feedback platform, citizens can participate in the implementation of the policy through various channels. At the same time, the relevant propaganda of garbage classification policy can also imperceptibly improve citizens' participation consciousness and cultivate citizens' initiative to participate in social construction consciously.

References

- [1] Xu Lin, Ling Maoliang, Lu Yujie. Study on the Influencing Factors of Urban Resident Waste Classification [J]. Journal of Public Administration, 2017,14(01): 142-153+160.
- [2] Chen Xiaoyun, Zhang Tingting. Policy Marketing of Local Government: Taking Guangzhou Garbage Classification as an Example [J]. Public Administration Review, 2015, 8 (06): 134-153+188.
- [3] Liu Mei. Experience of waste classification in developed countries and Its Enlightenment to China [J]. Journal of Southwest University for Nationalities (Humanities and Social Sciences Edition), 2011,32(10): 98-101.
- [4] Zhang Nongke. Reflections and Reconstruction of China's Waste Classification Model [J]. Urban Issues, 2017 (05): 4-8.
- [5] Xue Liqiang, Fan Wenyu. Public Management in Urban Domestic Waste Management: Domestic Research Review and Prospect [J]. Public Administration Review, 2017,10 (01): 172-196+209-210.
- [6] Zhang Liping, Zhang Zhonghua. The predicament of collective action of residents in source classification of municipal solid waste and its overcoming [J]. Journal of Wuhan University (Philosophy and Social Sciences Edition), 2016, 69 (06): 50-56.
- [7] Lu Xianfeng. External Pressure Mechanism and Induction Mechanism in Waste Classification Management [J]. Urban Issues, 2013 (01): 86-91.
- [8] Deng Jun, Xu Wanying, Zhou Chuanbin. Investigation on the effectiveness of classified collection of municipal solid waste in Beijing and Study on its long-term management mechanism [J]. Environmental Science, 2013, 34 (01): 395-400.
- [9] Chen Lanfang, Wu Gang, Zhang Yan, Zhang Yibin. Research status and key issues of garbage sorting and recycling behavior [J]. Eco-economy, 2012 (02): 142-145.
- [10] Liao Rujun, Huang Jianzhong and Yang Danrong. Current situation and Countermeasures of municipal solid waste classification and treatment in China [J]. Occupational health and injury, 2012, 27 (01): 30-34.
- [11] Ye Lan, Chen Qixing. Policy Analysis and Path Selection of Municipal Solid Waste Disposal: Taking Shanghai Practice as an Example [J]. Journal of Shanghai Institute of Administration, 2017, 18 (02): 69-77.
- [12] Lv Weixia, Du Juan. Experience of waste classification management in Japan and Its Enlightenment to China [J]. Journal of Central China Normal University (Humanities and Social Sciences Edition), 2016, 55 (01): 39-53.
- [13] Tian Huawen. Evolution and Future Trend of Urban Domestic Waste Management Policy in China [J]. Urban Issues, 2015 (08): 82-89.
- [14] Dou Linjuan, Sun Qiaohui, Changna. The Enlightenment of Japanese Waste Classification System to China [J]. Journal of Suzhou Institute of Education, 2012, 15 (04): 83-85.
- [15] Yang Fan, Shao Chaofeng, Ju Meiting. Foreign Experience in Urban Waste Classification [J]. Eco-economy, 2016, 32 (11): 2-5.
- [16] Matland, Richard .Synthesizing the Implementation Literature: the Ambiguity-Conflict Model of Policy Implemen- tation [J]. Jour nal of Public Administratio n and Research, 1995 , 5 (2).
- [17] Li Wenzhao. Institutional analysis of China's reform: Taking the comprehensive deepening of reform in 2013-2017 as an example [J]. China's Administration, 2018 (06): 18-25.