# Study on Treatment Dilemma and Countermeasures of Community Garbage Classification in Chengdu

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**ABSTRACT.** With the development of economy, the problem of urban garbage treatment is becoming more and more prominent. "Garbage siege" is a prominent problem that people generally care about, and domestic garbage treatment is urgent. In order to find out the existing problems in the process of community garbage classification in Chengdu and improve the efficiency of treatment, this study takes Chengdu community as a case, and studies the current situation of garbage classification, existing treatment problems and treatment countermeasures. Through investigation, it is found that there are still dilemmas in garbage classification, such as insufficient publicity, imperfect garbage classification facilities, imperfect legal and regulatory system, and imperfect reward and punishment mechanism. In order to solve the difficulties of garbage classification, it is also necessary to optimize the garbage classification and treatment path from multiple aspects, so as to optimize the living environment of urban communities.

KEYWORDS: Garbage classification, Treatment dilemma, Treatment countermeasures

# 1. Introduction

With the development of economy in the new era, the problem of urban garbage treatment is becoming more and more prominent. In recent years, garbage classification hasreceived the attention of the Chengdu Municipal Government and has been introduced Implementation Plan for Classification of Domestic Waste in Chengdu (2018-2020) and other policies. In addition, Garbage classification has also attracted the attention of domestic scholars. Domestic research mainly focuses on three aspects: firstly, the research on garbage classification policy. Due to the slow construction of classification logistics system and the participation of residents, it is difficult to promote the classification of garbage [1]. In addition, the convenience of recycling channels can also affect residents' initiative in participating in garbage classification [2]. Secondly, study on classification and treatment mode of garbage. Give full play to the role of scientific research institutions and institutes in the process of garbage classification and treatment [3], and give play to the leading role of community grassroots Party organizations[4]. In addition, the intelligent classification model of professional enterprises, which is led by the government, provides professional services by enterprises, and actively cooperates with residents, can be used for the classified treatment of community domestic garbage [5]. Thirdly, research on garbage classification policy. There is still a lack of clear and meticulous laws and regulations for the garbage classification system [6], and the rights and obligations of the government, enterprises and citizens are unreasonable. In order to ensure the smooth progress of garbage classification, it is necessary to improve the incentive policy, which can be inspired through the "green account" model [7]"Internet + garbage classification" incentive model [8], while paying attention to the role of negative incentives [9]. Build a more comprehensive incentive mechanism to better exert the incentive effect.

It can be seen from the domestic research that the current research results of urban domestic garbage classification by Chinese scholars are very rich, and discussed from different perspectives, which provides a reference for the study of this paper. However, there are still shortcomings, mainly due to the lack of in-depth and comprehensive discussion on the problem of waste classification and treatment in the existing research; many scholars have conducted research on cities such as Shanghai and Beijing that implemented waste classification earlier, but there is no in-depth analysis on new pilot cities such as Chengdu. Based on this, this paper intends to study the current situation of garbage classification, existing treatment problems and treatment strategies in Chengdu, and strives to find a way to solve the problem of garbage classification through research, so as to provide some experience for other regions and cities of garbage classification, and promote the development of domestic garbage classification practice in urban communities in China.

# 2. Status of Community Garbage Classification in Chengdu

## 2.1 Garbage Classification Standards and Equipment

The classification standard of community garbage in Chengdu is to divide domestic garbage into four categories: recyclable, harmful, kitchen garbage and other garbage. The allocation of waste classification equipment in each pilot community is mainly to equip each resident with two trash cans of kitchen waste and other waste downstairs. In addition, the small area is equipped with recyclable waste and toxic and harmful waste trash cans. Specific operating procedures are provided above the equipment to facilitate residents to correctly classify according to the operating procedure prompts.

## 2.2 Status of Garbage Classification

Through investigation and research, it is found that the treatment of community domestic garbage classification in Chengdu is not good. The pilot community waste classification has achieved certain results and the living environment has been improved, but in-depth investigation and research found that there are still many problems in waste classification. Some community residents are not familiar with the specific operation process of garbage classification and cannot be correctly placed; the conscious action of garbage classification of residents is not enough, and some residents are still randomly placed; the garbage classification facilities are not sound; the residents lack the knowledge of garbage classification, and there are still great difficulties for residents to independently classify garbage.

#### 3. Treatment Dilemmas of Community Waste Classification in Chengdu

Through the research, it is found that the implementation of community garbage classification in Chengdu has indeed achieved certain results, but there are also many problems, mainly facing the following dilemmas:

# 3.1 Insufficient Publicity

Through investigation and research, it is found that in the pilot project of household garbage classification in Chengdu community, the publicity intensity for community residents is not enough, the publicity mode is mainly posters, announcements, etc., the effect is not obvious. There is a lack of professional guidance and training for classified placement in each district, the correct rate of resident garbage placement is low, and the publicity intensity needs to be further strengthened.

# 3.2 Imperfect Garbage Classification and Collection Facilities

From the survey situation, most of the communities in Chengdu equipped with garbage classification facilities is too simple. There are almost only two garbage classification boxes of kitchen waste and other garbage downstairs in each unit for residents to put the main domestic garbage. The classification facilities are not perfect, the classification of resident garbage is not convenient enough to meet the needs of some residents, and there are some difficulties in the later garbage disposal.

#### 3.3 The System of Laws and Regulations for Garbage Classification is Not Sound

At present, most of the laws and regulations on garbage classification only provide principled provisions for the classified collection of urban domestic garbage, but these provisions do not clearly specify the responsibilities and obligations of governments, enterprises and individuals in urban domestic garbage classification, and do not formulate punishment standards for violations of garbage classification. These principled punitive provisions can flow in the form and are difficult to really play a role in practice.

## 3.4 The Reward and Punishment Mechanism is Not Sound

On the one hand, the incentive mechanism effect is not significant. There are still some problems in the practice of the integral reward system established by the government for waste classification. For example, the time to obtain points for classified garbage placement is limited, and it is difficult for many office workers to obtain points; the items exchanged for green account points are of limited value and lack appeal to young urban residents. On the other hand, the punishment system is not sound enough. At present, the garbage classification in Chengdu is mainly based on incentive measures, lack of specific punishment system and measures, it is difficult to standardize the garbage release behavior of residents.

# 4. Treatment Countermeasures of Community Garbage Classification in Chengdu

# 4.1 Strengthen the Publicity and Education of Garbage Classification

Publicity and education can be carried out in a variety of ways. On the one hand, Promote and broadcast public welfare advertisements, cartoons and other publicity materials on television, public transportation vehicles, online media and other platforms to enhance the sense of participation in the classification of rubbish by the whole people [10]. On the other hand, different modes of publicity are implemented for different ages. For children, education should be the main method; for young people, encouragement should be the main method; for the elderly group, incentives should be the main method.

# 4.2 Improve the Infrastructure Construction of Garbage Classification

Government departments need to increase investment in garbage classification infrastructure. By providing residents with corresponding garbage bags according to different garbage types, residents can be encouraged to classify at home. In addition, advanced technology and intelligent equipment are used to ensure the efficient operation of garbage classification work. Construct intelligent supervision platform and domestic garbage tracking platform, introduce advanced technologies such as intelligent garbage collection and processing system and video recognition system, and promote the continuous improvement of garbage classification [11].

## 4.3 Improve Reward and Punishment Mechanism

Realize the combination of reward and punishment mechanism. On the one hand, improving incentive policies, in addition to implementing point incentives, can also provide financial rewards and social honors to residents who perform well. On the other hand, residents who violate the provisions on regular and designated placement and litter can be supervised by using high-tech means such as face recognition. Include the information of illegal people into the public credit platform and implement joint punishments.

# 4.4 Improve the Garbage Classification Model of Co-Governance and Sharing

To realize orderly and efficient waste classification, it is necessary to reasonably design the co-governance mechanism, arrange appropriate governance subjects, and continuously strengthen the joint force of social co-governance [12]. Domestic garbage classification involves thousands of households, in addition to giving full play to the governance role of the government and the community, but also need to widely absorb social forces to participate in it. It is necessary to attract enterprises and social organizations to participate in the work of waste classification and dose reduction by means of government purchase of services, form a good situation under the guidance of the government and with the joint participation of enterprises, social organizations and the public, give play to the joint force of co-governance to build a clean and comfortable community together.

# 5. Conclusion

Garbage classification is an important way to solve the classification of urban domestic garbage. The pilot work of garbage classification in many cities in China is in full swing and will be widely carried out in the near future. However, there are still many dilemmas in practice, and how to solve the treatment dilemma of garbage classification will be a problem that we should think about. With Chengdu as the case, some communities have gradually launched the pilot work of garbage classification, and are allowed to face many dilemmas while achieving certain results, requiring the joint efforts of the government, communities, social organizations, community residents and other multiple subjects to improve the efficiency of garbage classification, build a cleaner and more comfortable community environment and urban environment, and improve the satisfaction and well-being of residents.

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