Thoughts on the Classification and Treatment of Rural Garbage under the Strategy of Rural Revitalization: a Case Study of Guli Street, Nanjing

Yan Ji, Yingying Shi, Shidan Wang

School of Business Administration, Hohai University, Changzhou, China

Keywords: Rural revitalization strategy, Garbage classification, Rural

Abstract: This article revolves around the strategy of rural rejuvenation, and takes Guli Street, one of the earliest pilots of waste classification in Nanjing as a research object, and introduces that the Zhoucun community in Guli Street includes domestic waste during the waste classification process. "Innovative measures such as fermentation of kitchen waste into organic fertilizer, classification with points, points exchangeable and" turning waste into treasure "have proposed funds and technologies to increase the classification and recovery of rural waste in China. Investment and formation of village-based management and supervision mechanisms, the implementation of effective incentives and punishment methods, the establishment of a rural garbage charging system, and the development of waste sorting collection and education and other countermeasures and suggestions.

1. Introduction

In December 2016, President Xi Jinping hosted the fourteenth meeting of the Central Finance and Economics Leading Group and emphasized that we must start with a comprehensive well-off society by addressing outstanding issues that are of common concern to the people, speed up the establishment of a waste classification and treatment system, and form a foundation based on the rule of law. Government promoted, national participation, urban-rural coordination, and localized waste classification system; On October 18, 2017, the Party's 19th National Congress reported on the implementation of a rural revitalization strategy, adhered to the integration of urban and rural development, adhered to the harmonious coexistence of man and nature, and adapted to local conditions; 2018 On January 2, 2014, the Central Government issue the "Document No. 1"-"Opinions of the Central Committee of the Communist Party of China and the State Council on the Implementation of the Strategy for Rural Rejuvenation." The "Opinions" proposed the implementation of a three-year action plan for the improvement of the rural human settlements environment. Sewage treatment and improvement of village appearance and village appearance are the main offensive directions to promote the treatment of prominent problems in the rural living environment. During the National Two Conferences in 2018, representatives of the committee successively provided suggestions on how to promote the mandatory classification of garbage. China[1-5].

2. Regional Overview

This article uses Nanjing Guli Street as a research sample.Guli Street belongs to Jiangning District, Nanjing, and is located in the west of Jiangning District. It is located in the southwestern part of the southern core of the 30-meter radius of the Nanjing metropolitan area.It is located in the state-level Nanjing Jiangning Economic and Technological Development Zone and Jiangsu Province-level Nanjing Jiangning Binjiang Economic Development Zone is an expansion zone only 22 kilometers away from the main street of Nanjing's main city. It is a key development group for the tourism and leisure industry in the southern part of the main urban area of Nanjing and a green corridor construction zone. Won the title of "National Street with Beautiful Ecological Environment". Among them, Zhouli Community in Guli Street is one of the first two communities in the city to carry out rural waste classification pilots. The development of rural garbage

DOI: 10.25236/edbm.2020.224

classification is relatively mature. At present, after the pilot promotion, the end of 2017 Previously, the 11 communities in the street have all realized garbage sorting[6-10].

3. Introduction of Innovative Measures for Garbage Classification

(1) Domestic waste "two quarters"

Shiwa Taoyuan has 36 resident farmers, of which 22 are farmhouse operators and 14 ordinary households. Since the implementation of the waste sorting pilot, the Zhoucun community has equipped each villager with two garbage bins to carry out "twice" of domestic garbage. Four-point method ". Villagers are divided into two categories according to" wet garbage "and" dry garbage "at the source and then put into garbage bins distributed by the community. The cleaning staff collects and transports each morning and evening, and large and toxic and hazardous garbage are collected weekly. The second sorting is mainly completed in Guli Street garbage sorting center, and the secondary sorting is performed by cleaning staff and professional equipment, and the recyclable garbage, non-recyclable garbage, and toxic and hazardous garbage are recycled or reused or harmlessly processed.

(2) Fermentation of kitchen waste into organic fertilizer

There are many operating households in Shiyuan Taoyuan Farmhouse. Every tourist season, the village is full of tourists, the catering business is particularly good, and the amount of food waste is large. To this end, the Zhoucun community has built a 60 square meter food waste treatment center, and Equipped with a device that handles 300 kg of kitchen waste a day, it can provide a strong guarantee for the daily disposal of end-of-life waste, ensure the sustainable and healthy development of community waste sorting, and kitchen waste can be turned into organic fertilizer through professional fermentation treatment. A waste sorting, storage and sorting center has also been built, and specialized equipment has been introduced for automated sorting.

(3) points are classified, points can be exchanged

In order to encourage and guide residents to actively participate in garbage classification, the Zhoucun community adopts a point reward system of "classification can be integrated, points can be exchanged, and exchange can be benefited." The garbage classification instructor comes to the site to score points according to the classification of farmers. Publicize the list through the month. Issue points exchange coupons to exchange rice, oil, salt, cool, towels, washing powder and other daily necessities at designated shops in the community.

(4) "Turn waste into treasure"

The Zhoucun community docks with nearby middle schools every year to carry out the theme activity of turning waste into treasure. Participants decorate and renovate the abandoned items, so that they have re-use value, and not only realize the linkage between the community and universities The cooperation also promoted the awareness of green environmental protection, so that children have a deeper understanding of waste classification, and improved the green environmental awareness of waste classification.

4. Countermeasures and Suggestions

(1) Increase capital and technology investment for classified recovery

The problem of garbage disposal is a public issue, and the governmentbears important responsibilities in it. The government should solve various difficulties and provide various support for the separation and recovery of rural waste. Through funding and technology to the countryside, establish and improve rural waste separation and recovery devices. And further improve transportation facilities for the centralized collection and transportation of garbage; popularize and develop scientific garbage disposal methods suitable for rural areas, implement harmless garbage treatment; introduce garbage recycling processing plants through open tendering, and encourage townships to use private Management or collective operation, contracted management, and annual subsidies and rewards through public finance, introducing market mechanisms into it, and realizing the industrial chain of rural waste separation and recycling. Ensure that funds and technology can be

supplied in a stable and sustainable manner, forming a mature waste classification Recycling system, fundamentally solve the problem of rural garbage.

(2) Form a management and supervision mechanism with villages as the unit

Sorting and recycling of rural waste should be carried out from the source, and reducing the amount of rural waste involves each villager. The township government and village committee are the rural grass-roots organizations that communicate with the villagers, and their active participation is the key to the effective implementation of rural waste sorting and recycling. It will be responsible for recruiting professional personnel from the society, formulating a reasonable and effective garbage separation and recovery mechanism, and implementing a three-level garbage collection system of "household, village collection, and town (village) treatment". According to the classification of waste, each administrative village can Villages and towns' transportation facilities have established temporary garbage collection stations to collect different types of garbage. Each township must set up a garbage treatment plant at a suitable place. The garbage collected from each village is regularly centralized for harmless treatment, and a special person is responsible for monitoring whether Processing is in place to form a three-level work supervision and management mechanism with clear powers and responsibilities.

(3) Implement effective incentive and punishment methods

For rural areas, garbage classification is still a new thing. Villagers' awareness of garbage classification is low, and the awareness of garbage classification has not been deepened. They still maintain an unfamiliar attitude. Waste classification is a long-term project and must be established Based on the comprehensive waste treatment system, China has not yet established a comprehensive supporting system. For rural areas, waste classification is still in its infancy, and a good reward mechanism is currently a relatively fast and effective means. Recycling the sorted garbage by farmers, and giving a certain reward, mobilizing the participation of villagers, and then forming a sense of garbage sorting and recycling.

(4) Establishing a rural garbage charging system

In some countries and regions, the treatment of municipal waste has undergone a transition from the use of order means to economic means, and the implementation of waste collection, transportation and treatment fees is one of the most common means. According to the current status of China's rural economic development, it is known that the government's financial investment and There is a huge gap in the funding requirements for rural waste separation and treatment. To this end, in rural areas, the practice of cities can be emulated, and according to the "who pollutes, who treats, who pays" requirements, waste treatment fees are collected according to the classification of waste, and paid services are implemented. Attracting social capital to participate in the classification and recycling of rural waste can not only make up for the lack of financial investment, reduce the workload of the government, but also promote waste reduction, and achieve the purpose of enhancing villagers' environmental awareness and promoting rural environmental construction.

(5) Carry out publicity and education on waste separation and collection

Departments at all levels should unite village groups, use radio, television, posters and other forms to carry out publicity and publicity, vigorously publicize the damage caused by the damage and pollution of rural ecological environment to the living environment and physical and mental health of farmers, and the importance of rural ecological environmental protection; It is also necessary to popularize common sense for rural garbage classification and inform villagers how to classify garbage. At the same time, publicize the punishment for polluting the environment. Make the concept of environmental protection deep into the minds of every villager, and prevent its bad behavior of littering and dumping. Building a harmonious and beautiful new countryside.

References

- [1] Tian Yajing, Pei Xiaofei, Sun Yangzhao. Management of Domestic Waste in Japan and Its Enlightenment to China [j]. Environmental Protection, 2016, (19).
- [2] Wu Linying. Summary of the investigation of domestic garbage treatment in Germany and its

- enlightenment to Guangdong Province [j]. Environmental Sanitation Engineering, 2017, (2).
- [3] Wu Ke, Michael Nelles, Cai Jingmin, Yu Zhimin, Jin Jie, Liu Bin. Status of MBT Technology in German Municipal Solid Waste Treatment [J]. China Resources Comprehensive Utilization, 2005, (09): 16-22.
- [4] Lu Licai, Chen Jiawei. Lessons Learned from American Rural Waste Management Services [j]. World Agriculture, 2017, (5).
- [5] Han Zhiyong, Fei Yongqiang, Liu Dan, Dan Zeng, Zhang Ye, Shi Guozhong, Wang Jialei, Xie Yanhua. Analysis and treatment suggestions on the production and physical characteristics of rural domestic waste in China [j]. Journal of Agricultural Engineering, 2017, (15).
- [6] Du Jinxiang, Li Yuan. Necessity of rural waste sorting and implementation countermeasures [J]. Modern Agricultural Science and Technology, 2017, (11): 294-295. DOI: 10.3969 / j.issn.1007-5739.2017. 11.175.
- [7] Lu Licai, Chen Jiawei. Lessons Learned from Rural Waste Management Services in the United States [j]. World Agriculture, 2017,(5).
- [8] Zhang Aiping, Li Min, Chen Weiming, Hu Lingzhi, Shi Guozhong. Study on the characteristics of rural household waste, villagers' consciousness and disposal mode around Chengdu [j]. Environmental Pollution and Control, 2017, (3).
- [10] Xue Ling, Su Zhiguo, Zhang Shuping, Zhang Sirong, Yue Min, Yue Qinyan, Wang Renqing. Experimental Research on Four Classifications of Rural Domestic Waste [j]. China Population, Resources and Environment, 2016, (s2).
- [11] Lu Yong. Thinking and practice of technology evaluation of Guangzhou garbage classification effect [j]. Guangdong Science and Technology, 2017, 26 (05): 92-94.