

# Synergistic management of rural sewage

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## Abstract

Rural sewage treatment is an important part of China's rural habitat improvement, and is of great significance to the maintenance of farmers' environmental rights and interests. However, in the process of rural sewage treatment, there are problems such as lack of protection of rural environmental legislation, incomplete system, insufficient protection mechanism for farmers' environmental rights, low participation of farmers, weak legal awareness and insufficient funds. The protection of the environmental rights of peasants requires the co-operation of different state organs and the co-operation of multiple subjects, and the construction of a co-operative governance system is conducive to the improvement of the overall environment in rural areas. For this reason, the construction of a coordinated governance system requires the improvement of legislation relating to the rural environment, the clarification of the rights and responsibilities of each subject, the strengthening of the construction of a coordinated law enforcement system in rural areas, and the establishment of a mechanism for the sharing of public information.

## Keywords

Peasants' environmental rights; domestic sewage; construction of synergistic systems.

## 1. Introduction

Rural domestic sewage refers to the wastewater produced in the process of residents's living, mainly including two categories of black water and grey water, of which the sewage produced in the kitchen, laundry, cleaning and bathing generated in the life of farming families is known as grey water; while

the high of domestic sewage produced by rural residents'excretion and flushing of faeces belongs to black water. With the vigorous promotion of rural revitalisation, society and the government are paying more and more attention to the damage to the rural water environment caused by the casual discharge of domestic sewage. The treatment of rural domestic sewage is one of the important tasks in the work of ecological environment improvement, and the intensity of the treatment of domestic sewage has been increasing around the world. In recent years, the central government and relevant ministries and commissions have formulated and issued a series of policy documents, such as the introduction of the 'CPC Central Committee State Council on further deepening the rural reform and solidly promote the opinions of comprehensive rural revitalisation', that is, the official release of the Central No. 1 Document in 2025, which is the 13th since the 18th CPC Central Committee to guide the 'three rural' work. This is the 13th central No. document guiding the 'three rural areas' since the 18th Party Congress. Due to the weak governance of the water environment in rural areas, the ecological governance of rural sewage as a key part of the enhancement of the rural habitat environment, so it is necessary for the relevant departments to explore the synergistic governance strategy, give full play to the functional role of the main body, the formation of a multifaceted synergistic sewage governance work pattern.

## 2. The current situation of rural sewage treatment

With the implementation of the rural revitalisation strategy, China's rural sewage treatment is now in its infancy, and many areas do not have sound sewage collection facilities and a complete implementation system. Even some eligible administrative villages have different treatment rates for sewage due to inadequate facilities and systems. Compared with cities, domestic sewage in rural areas usually comes from two sources: first, sewage generated in the course of residents' daily life, work and some commercial activities (e.g., catering, farmhouse). Second, excreta and wastewater generated from poultry such as chickens, ducks, cows and pigs kept by farmers. At present, there are three ways of rural domestic sewage treatment. Harmful substances contained in the sewage or substances that have an impact on the water environment can be removed or reduced in a physical or chemical way; ii. Resourceful treatment, also known as effective control or resource utilisation, refers to the neutralisation of the water quality according to the actual situation of the local villages can be used for purposes such as irrigation of farmland and thus achieve the reuse of resources; Third, the use of biological and ecological combination of sewage treatment, so as to achieve the purpose of reducing harmful substances in sewage.

## 3. Problems in the collaborative management of rural domestic sewage

Although rural domestic sewage in the national advocacy has achieved remarkable governance results, but from the protection of farmers' environmental rights, there are still some deficiencies.

### 3.1. Rural environmental legislation to protect the lack of position, the system is not sound.

Peasants' environmental rights safeguard the environment on which peasants rely for survival and development, so that the majority of peasants can produce and live in suitable environmental conditions. Firstly, there is a lack of special legal norms in the law at the national level. Although the existing laws and regulations related to the improvement of rural habitat have played a positive role in strengthening sewage management, they are scattered and embodied in various sectoral laws, and most of them are principled provisions, without clear details of the problem, and lack of specific and feasible programmes, so the law enforcement elasticity of law enforcers will become larger, and it is difficult to adapt to the current needs of the work, which is not conducive to the protection of the rights and interests of farmers. In addition to this, most of the regulations are managerial, supervisory provisions, the lack of corresponding legal responsibility provisions and penalties for violation of the relevant provisions. Such as 'People's Republic of China Water Pollution Prevention and Control Law' for water pollution in urban areas with a special section of the description and specific principles, but for the prevention and control of water pollution in rural areas are not clearly defined.

Secondly, in the process of rural ecological environment improvement continues to promote, ignoring the special characteristics of farmers as a vulnerable group, the protection of farmers' environmental rights and interests of the relevant provisions of the few and far between, resulting in rural residents in the environmental rights were damaged can not be timely access to judicial remedies, therefore, in the legislation of the environmental rights and interests of peasants are still scarce provisions.

### 3.2. Incomplete protection mechanism of environmental rights of peasants

As the living standards of rural residents continue to improve, the amount of water used in their daily production activities has also increased, but China's protection of the environmental rights of rural residents is still not perfect, especially the farmers' right to environmental claims,

litigation, and rural environmental supervision mechanism. Rural sewage in China is mainly supervised and managed by the environmental protection departments of the people's governments at the county level and above. As the population is more dispersed, the sewage discharges generated in their lives are also more dispersed, and there are many difficulties in relying only on these small numbers of law enforcement officers. Moreover, most townships have neither specialised environmental protection agencies nor full-time staff to participate in governance and management. Village committees, as grassroots self-governing organisations, should fully carry out their duties and guide villagers to be aware of their environmental rights, so as to enhance their ability to safeguard peasants' environmental rights. As a vulnerable group, farmers enjoy the rights granted by the law, but without a sound mechanism as a guarantee, even if the farmers want to defend their own rights and interests when they suffer from environmental infringement, it is difficult to achieve relief.

### **3.3. Peasants' own weak legal awareness**

Farmers enjoy the right to environmental participation. The right to environmental participation on the one hand refers to the farmers have the right to participate in their rural environmental improvement activities, on the other hand, farmers have the right to other organisations to manage the environment to exercise the right of supervision. In most areas, in the overall planning of governance, few people guide the farmers to actively participate, only when they need to cooperate with them to communicate with them, and not fully consider the actual needs of local farmers, the farmers' right to environmental participation is not guaranteed, and many villagers think that their own requirements have been ignored, and they don't know how to safeguard their own rights and interests, and therefore don't cooperate with the management of sewage, which leads to sewage management work with great difficulties.

The publicity and promotion of government policies and regulations on rural sewage treatment are not in place, and villagers subconsciously believe that the government has taken the initiative to provide treatment services to bring about environmental improvement, and they do not have the habit of caring for a good living environment. The lack of awareness of environmental protection among farmers themselves is also one of the reasons for the increasing number of environmental infringement problems. Compared with the city, the rural areas for the popularisation of legal knowledge and legal concepts are significantly behind the city, when the legitimate rights and interests are infringed upon, the villagers do not know to take the initiative to seek legal help, to protect their legitimate rights and interests, and will not actively exercise their rights.

### **3.4. Not enough economic support**

At present, the main source of funds for sewage treatment is financial allocations, the government units in rural areas have limited funds, and the channels for raising funds are relatively narrow, in the process of sewage treatment and the need to spend a lot of money, so over-reliance on the government's finances is far from being enough. For example, Anhui Province, the public budget not only in urban and rural communities, agriculture, forestry and water expenses, but also in public security, education, science and technology and other aspects of expenditure, so the budget allocated to rural areas is very limited. However, the treatment of rural sewage is characterised by a long period of time and small expected benefits, coupled with a lack of government support in the form of policies, the enthusiasm of many enterprises to participate in the process is relatively low, and there is a lack of social capital to participate in the process.

## **4. The path of rural sewage management synergistic system construction**

### **4.1. Improve the legislation related to the environmental rights of peasants**

Highlight the main position of peasants in the environmental rights. At present, the Constitution of China does not specify the environmental rights of farmers, which makes the protection of farmers' environmental rights lack of legal basis. Therefore, it is necessary for the national legislature to strengthen the relevant legal support and construction, to list the environmental rights of peasants separately in the relevant legal departments, in order to clearly stipulate the right to information, the right to relief, etc., to improve the institutional mechanism in the field of environmental rights and interests of peasants, and to guarantee the judicial relief of peasants, and to promote the collaborative governance of multiple subjects. Although there is no special law on rural sewage, a large number of legal basis can be found in the relevant legal documents, through combing the relevant laws or policy provisions can avoid the waste of resources caused by duplication of legislation, combined with the actual situation in each region, refine and improve the implementation of the policy paths and processes, to find out the doubts and difficulties in the implementation of the policy, and targeted to solve the sewage treatment process. The policy needs in the process of wastewater treatment are addressed in a targeted manner, and relevant policy support actions are made.

### **4.2. Clarify the rights and responsibilities of the main bodies in collaborative governance**

The government is the leader of collaborative governance, to seize the protection of farmers' environmental rights, the treatment of domestic sewage, improve the rural environment as a general direction, to make full use of information technology and other resources, the whole process of sewage treatment for scientific planning, and play a leading role in the layout of the main body. According to the actual situation of each region to determine the governance programme of rural domestic sewage in the area, the classification of different types of domestic sewage, using different ways of governance.

Enterprises are the undertakers of rural domestic sewage treatment. Compared with other governance subjects, enterprises have the following advantages: (1) professional advantages. On the one hand, it can solve the professional problems encountered in the process of governance, and provide professional technical services for the government or other governance subjects, and on the other hand, it can popularise the knowledge of domestic sewage treatment to the villagers. (2) Information advantage. In the process of governance, enterprises can be the latest information in order to adjust the governance technology and equipment at any time.

### **4.3. Strengthening the construction of rural collaborative law enforcement system**

Market players and social organisations play an important role in rural sewage management, so in the process of sewage management not only needs the participation of the majority of farmers, but also needs to stimulate the synergistic participation of market players and social organisations and other pluralistic subjects, and through the synergistic governance between the two and the public power, to achieve the maximum effect of domestic sewage management. In the pluralistic governance, it is essential to strengthen the rural environmental law enforcement management and supervision and management. Firstly, in order to protect the environmental rights and interests of farmers, the environmental protection department should strengthen the management of the law enforcement personnel who are most closely connected with the grassroots people, and continuously improve the quality of the law enforcement personnel. Secondly, in order to ensure the independence of environmental law

enforcement departments, it is necessary to strengthen the construction of the rural environmental law enforcement system, and strengthen the vertical management of the higher-level departments to the lower-level environmental protection departments. The Fifth Plenary Session of the 18th Central Committee clearly put forward: 'Implement vertical management of monitoring, supervision and law enforcement of environmental protection agencies below the provincial level'. Therefore, it is necessary to promote the reform process of vertical management of environmental protection agencies, get rid of the constraints of local governments on environmental protection departments at the same level, and enforce the law independently. Finally, improve the supervision and management rules of law enforcement, implement the responsibility of law enforcement, promote the establishment of a sound system of law enforcement responsibility, try to diversify the means of law enforcement, ensure the operability of law enforcement methods, standardise the procedures of law enforcement of the rural environment, the penalties and the corresponding legal consequences, so that law enforcement officers have a clear guide to deal with the actual work.

The water environment has a holistic nature, so sewage treatment should also be considered from a general perspective, from the perspective of the environment as a whole, the full layout, unified implementation. The formation of the Environmental Protection Bureau as the main, Planning Bureau, Water Resources Bureau, Urban Management and Law Enforcement Bureau as a complementary law enforcement pattern. In the face of the various horizontal departments, the Environmental Protection Bureau in the implementation of synergistic and joint law enforcement, mobilisation capacity is very limited, in order to make the rural sewage joint prevention and control governance model really work, it is necessary to multi-departmental collaborative law enforcement.

#### **4.4. Establishment of a mechanism for public sharing of information to guarantee farmers' right to environmental information**

The establishment of public information is conducive to the guarantee of farmers' right to environmental information. Farmers' right to environmental information refers to the information available to farmers on the state of the environment and on the state of the State's management of the environment. Information disclosure facilitates farmers' participation in governance and is the basis for building trust and collaborative governance among multiple governance actors. Farmers' right to environmental information is not sufficiently guaranteed, mainly because environmental law enforcement agencies only report on the state of governance to their superiors, and farmers have access to very little information. Therefore, on the one hand, when publishing information, we should minimise the use of technical terms and use some easy-to-understand ones, and on the other hand, we can formulate a way of disclosing environmental information that is suitable for rural areas and can let villagers know in time, so that they can better protect their rights. In the process of collaborative governance, convenient and efficient sharing of information can effectively reduce the problem of information asymmetry between the subjects, eliminate the barriers to co-operation between multiple subjects, and achieve more efficient governance.

At present, in the disclosure of environmental information, there are still problems such as insufficient legislative protection, incomplete disclosure of information, insufficient supervision and insufficient relief of rights. The initiative, authority, comprehensiveness and collaboration of information disclosure should be strengthened in the future improvement of information disclosure mechanism, especially the typical cases of domestic sewage treatment should be kept open and transparent. All grassroots organisations should always uphold the concept of people-centredness, based on the actual needs of the villagers, and fully protect their rights to information, participation and supervision.

Build an information sharing platform within the government to provide information technology support for the common planning of rural human settlements, give full play to the synergistic effect of information resources in rural domestic sewage management, integrate the governance of rural domestic sewage into rural human settlements governance, and enhance the precision of sewage management resource allocation.

## 5. Conclusion

Although the country in the new era is paying more and more attention to the development of rural areas, the strategy of rural revitalisation is also being vigorously promoted, and the development of rural areas in terms of material, ecology, spirituality, civilization and other aspects is also progressing, but it still hasn't changed the status quo that farmers are still out of the disadvantaged group, especially in the environment.

General Secretary Xi Jinping put forward the concept of ecological governance, which requires us to pay attention to the improvement of the rural environment and the protection of farmers' environmental rights and interests. The application of the collaborative governance mechanism to the governance of domestic sewage is able to integrate diversified social resources and make use of the synergistic efforts of multiple subjects, and to a certain extent, it is able to alleviate the problems of lagging supporting resources and insufficient funds of the public authorities, in order to accelerate the promotion of the governance of rural domestic sewage and the improvement of the human environment. Promote rural sewage management is the basic requirements of rural water security construction, is to enhance the quality of the rural water environment is an important guarantee, about the immediate interests of the majority of rural residents.

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