

## Study On Legal Issues Of Rural Water Environment Protection Along Lijiang River

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**Abstract:** With the deepening of urbanization in rural areas, the ecological situation in rural areas is deteriorating, and water environment problems are increasingly prominent. As an important part of "implementing the strategy of Rural Revitalization", rural environmental protection plays an irreplaceable role on the road of Rural Revitalization. Based on the analysis of domestic and international legal status, this paper takes the water environment of Lijiang river rural area as the breakthrough point, and combines with the national and local rural water environment governance system, puts forward some suggestions for protecting the water environment of rural areas along the Lijiang River.

### 1. Questions raised

In recent years, the problem of water pollution in China has attracted wide attention in the world. The state and governments at all levels are fully aware of the necessity of comprehensive treatment of water pollution. The amendment of the law on the prevention and control of water pollution, for the first time, has brought agricultural and rural water pollution into the scope of prevention and control, reflecting the state's attention to rural water pollution. The proposal of the "water pollution prevention and control action plan" will strengthen the control of water pollution in rivers and lakes, water pollution sources and agricultural non-point source pollution[1]. According to the analysis of water supply and water consumption data in Guilin from 2012 to 2017, the surface water supply in Guilin decreased from 42.74 billion cubic meters in 2012 to 3.918 billion cubic meters in 2017, but the domestic water consumption increased from 2.7 in 2012 to 310 million cubic meters in 2017, and the proportion of agricultural irrigation water has been maintained at about 70% since 2012. In 2016, Xingan County of Guilin adjusted the scope of Xiangjiang drinking water source protection zone and moved the water intake upward; in the same year, Lingchuan County also moved up the water intake[2]. Combined with the above data and environmental pollution cases, to a certain extent, the plight of water environment in the coastal areas of Lijiang River is highlighted. Therefore, under the background of China's water environment protection and Rural Revitalization Strategy, starting from the specific situation of the rural areas along the Lijiang River, on the basis of understanding and learning the rural water pollution control system of Japan and the United States, this paper discusses the existing problems of the rural water environment along the Lijiang River, and puts forward suggestions and suggestions for protecting the water environment of Lijiang River.

### 2. Current Situation Of Rural Water Environment Protection At Home And Abroad

#### 2.1. Current Situation Of Rural Water Environment Protection In China

From the perspective of legal system, there are no special measures for the protection of water environment along the river in our country, but we take it as a whole to prevent and control pollution. Although the promulgation of water pollution prevention and control law in 1984,

Fisheries Law of the people's Republic of China in 1986 and Cleaner Production Promotion Law of the people's Republic of China in 2003, the prevention and control of rural water environment is only in the primary stage, lacking pertinence and particularity, and the technical specifications and standards are not perfect. With the implementation of a series of systems and policies, such as "Regulations on pollution prevention and control of livestock and poultry scale breeding", "action plan of water pollution prevention and control" and "national agricultural sustainable development plan (2015-2030)", although the overall attention to the rural environment has been strengthened, the prevention and control of rural pollution in China has entered the strengthening stage. For example, there is still a blank in the management and protection of rural water environment in the areas along the river. Although Jiangsu, Hebei, Fujian and other regions have formulated corresponding measures according to their own conditions, there are few relevant systems for rural water environment protection in accordance with the national standards for rural water pollution prevention and control.

From the perspective of system implementation, combined with the recent urban garbage classification pilot, it also exposed the problem of rural garbage to a certain extent. According to the distribution characteristics of rural areas, especially affected by the topography in Guilin area, there are many more serious problems in garbage disposal than in cities, such as random discharge of domestic sewage, non-point source pollution and urban pollution returning to villages. In view of the environmental pollution in rural areas of China, although there are relevant policies and regulations for the overall regulation, but garbage piles, domestic sewage discharge and other phenomena are still outstanding problems in rural areas. The specific implementation of relevant policies and systems is very worrying. China's rural environmental pollution has entered the stage of prevention and management[3].

## **2.2. Current Situation Of Water Environment Protection In Rural Areas Of Foreign Countries**

Because of the rapid economic development of the United States and Japan, they have recognized the harmfulness of water pollution and the importance of rural environment, and have formed a relatively perfect governance system. In order to protect the rural water environment, developed countries often adopt a rural water pollution prevention and control system combining legal, administrative and economic means. The United States and Japan have established environmental management institutions with comprehensive decision-making and coordination capabilities to form a rural environmental protection mechanism dominated by the government, Combined with the specific national and regional laws and regulations, supervision and law enforcement, treatment technology, etc., and with environmental and economic measures adapted to local conditions, the local rural water pollution prevention and control system is comprehensively improved.

### **2.2.1. Relevant Regulations Of Water Environment Protection In USA**

In terms of legislation and policy. In the legislative purpose of the United States, it is emphasized that the protection of natural environment, ecological resources and human health should be taken as the main aspects when formulating laws and policies related to environmental protection[4]. In terms of rural water pollution control, the United States has a systematic water pollution prevention and control laws and regulations, such as the non-point source pollution management plan issued by the environmental protection agency, the national irrigation water quality plan issued by the Ministry of water resources, etc[5]. Through the control of rural non-point source pollution, it also promotes farmers to solve the rural water pollution problems. In terms of management and control. The United States adopts two ways of "rigid law enforcement" and "flexible law enforcement". In addition to strict supervision by law, the United States also relies on informal law enforcement projects such as high-tech to improve the law-abiding ability or motivation of the counterpart, enhance the operability of the system, and strengthen the initiative of residents to protect the water environment[6]. In view of the rural water environment problems, the United States has formed a complete governance system. Taking non-point source pollution as an example, the Ministry of

agriculture has set up a special fund to support the development of ecological agriculture, the Bureau of soil and water conservation provides technical guidance for farmers, and the Ministry of the interior and the General Administration of environmental protection provide information on water resources planning of different scales to comprehensively prevent and control rural pollution.

### **2.2.2. Regulations On Rural Water Environment Protection In Japan**

With the social and economic development of Japan, it constantly adjusts the management of rural ecological environment, and promotes the development of rural areas several times. In terms of legislation and policy, Japan strengthens the specific implementation of rural water environment legislation through the combination of legislation and policy support. While focusing on the pertinence of each law, Japan also strengthens the matching and operability of various laws and policies, so as to provide systematic support for environmental protection[7]. Taking the "purification tank" sewage treatment technology as an example, Japan has formulated a series of laws and regulations such as the "purification tank law" and "the rules for the implementation of the purification tank law", supplemented by government financial means to promote the development of supporting policies and technologies, so as to form a relatively complete sewage treatment system in various regions. In terms of environmental management, Japan has formed a complete management mechanism from the central government to the local government and then to enterprises. Taking local government supervision as the leading role, it should keep close contact with local enterprises while implementing the central decision-making. For example, the local government will send pollution prevention and control administrators to Japanese enterprises, who will supervise the enterprise's pollution discharge and report to the government departments on a periodic basis.

## **3. Rural Water Environment Problems Along Lijiang River**

As a province with high river density in China, Guangxi Zhuang Autonomous Region accounts for about 7.1% of China's annual runoff, and its water resources account for a large proportion in the country. Therefore, the change of water environment in this region will have an impact on the water environment of the whole country to a certain extent. According to the instructions and requirements of the central ecological environment protection, the Guangxi People's government formulated and published the three-year battle plan for water pollution prevention and control in Guangxi (2018-2020), which put forward clear combat objectives and operational plans. However, the rectification scheme mainly aimed at rural problems in the whole province did not specifically address the rural water environment problems in a certain area, and there were legal concepts and agricultural issues. There are some problems, such as unsuitable villages, general laws and regulations, low operability in rural areas, and lack of management mechanism in rural areas[8]. The Lijiang River is the most important surface water resource in Guilin, and its tap water and industrial water are also from Lijiang River[9]. Therefore, the change of water environment along the Lijiang River will have an important impact not only on Guilin City, but also on other areas it flows through.

### **3.1. The Thought Of "Valuing The City And Neglecting The Countryside" Is Serious**

Whether it is the nationwide implementation of the river chief system in 2016, or the implementation of relevant systems, there is a certain idea of "attaching importance to the city and neglecting the countryside" in the regional layout. As the main source of rural water pollution, domestic sewage, chemical fertilizer, pesticide and factory production, China's relevant laws do not clearly distinguish the differences between urban and rural areas. Most of the rural areas refer to the urban governance standards to regulate specific rural matters. According to the different distribution characteristics of urban and rural areas, it is easier for local environmental authorities to supervise, manage and publicize the water environment in urban areas, resulting in the lack of corresponding supervision and education in rural areas. As the main water resource of Guilin, Lijiang River also has the above problems. As the main support of Guilin tourism development, Lijiang River has paid

more attention to the ecological environment management of scenic spots along the Lijiang River, while ignoring the impact of the rural areas along the Lijiang River on the water environment.

### **3.2. The Law Enforcement Of Rural Water Pollution Prevention And Control Is Not Enough**

In recent years, both the central and local governments have issued some environmental protection laws, regulations and policies, and the investment in environmental pollution control funds and national supervision and management are also strengthened year by year. Although the rural exchange has been improved, the effect is not obvious, the investment of law enforcement funds is not enough, and the executive power of local government is not strict. Taking the river chief system implemented in 2016 as an example, although the sustainable development level of water environment in the vast urban areas of Guilin has been significantly improved, there are still problems such as no identification, unclear labeling, unknown river length, imperfect management system, and shortage of funds for river regulation.

### **3.3. River Pollution Spreads Rapidly And Has Great Influence**

With the development of urban integration, facing the intensive production of agriculture and factories, the management departments should pay more attention to the environmental conditions in rural areas while strengthening the supervision of central areas. Combined with the characteristics of numerous small tributaries and topography of Lijiang River, in the face of random discharge of rural domestic sewage, non-point source pollution and urban pollution retreating into villages along the Lijiang River, with the continuous inflow of small rivers of Lijiang River, even if the pollution of small rivers is not serious, the inflow of pollutants from many rivers will cause huge pollution problems. Therefore, we should not underestimate the pollution of small rivers. The pollution along the small tributaries and remote rural areas has an impact on the overall water environment of Lijiang River.

### **3.4. River Pollution Spreads Rapidly And Has Great Influence**

In order to know more about the research situation of water environment in the rural areas along Lijiang River in Guangxi, the author searches for the title of "rural water pollution along the coast", "rural water environment in Guangxi", "rural water pollution in Guangxi", "rural water pollution along Lijiang River" and "rural water environment along Lijiang River". There are only a dozen related articles, which shows that there is less attention paid to the legal issues of water environment in rural areas along the rivers in China, not to mention the research on the legal issues of water environment in the rural areas along the Lijiang River in Guangxi.

Comprehensive analysis of the above situation, it is not difficult to find that, whether in theory or practice, foreign countries have paid attention to the rural water environment problems earlier, and carried out more in-depth research on rural water environment, forming a relatively complete rural environmental governance system suitable for local conditions. Compared with the analysis of the situation in China, the attention of rural water environment in China is less, the theoretical research is more scattered and not deep enough, and there is a lack of specific and appropriate legal system.

## **4. Suggestions On Rural Water Environment Protection Along Lijiang River**

Under the background of national water pollution prevention and control, Jiangsu, Yunnan, Hubei and other places in China have formulated a series of measures suitable for the development of local rural water environment, such as Hanji Township, Hanchuan County, Hubei Province, after comprehensively analyzing the characteristics of local rural water pollution, from the aspects of industrial, domestic sewage, waste and intensive breeding pollution, formulated the measures to prevent urban pollution from retreating into the village and improve the pollution Water treatment infrastructure and other strategies[10]. The Lijiang River, as the support of Guilin's development, can also be based on the local situation, combined with the treatment experience of rural water environment in Yunnan, Hubei and other coastal areas, and put forward measures suitable for local rural development, so as to promote the implementation of local water environment protection

system and rural water pollution system, and realize the sustainable development of Lijiang River water resources.

#### **4.1. Building A Suitable Manual Of Rural Environmental System**

Looking at the legal system related to water environment or rural environment in China, the legal norms related to rural areas are scattered and lack of a complete rural environmental governance system, while the local environmental system for Lijiang area is very few, and the rural environmental problems involved in relevant systems and regulations are relatively scattered. Therefore, the author believes that the local government can sort out the laws and policies related to rural areas, form a relatively complete system manual, combine the overall content of the manual, check and make up for deficiencies, form institutional norms with local rural characteristics under the principle provisions, determine appropriate environmental protection standards, and strengthen the local rural land through the publicity and education of each village. The publicity and education of district specific system will lay the foundation for the follow-up work.

#### **4.2. Optimize Industrial Structure And Improve Sewage Facilities In Rural Areas**

Due to the unique topography of Lijiang River, the local government is carrying out the supervision of rural water environment. There are some difficulties in governance. Therefore, the author believes that we can control the source of pollution by strengthening the source management, that is, standardizing the opening conditions of relevant agriculture and industry in rural areas along the river banks, and strictly stipulating the standards for sewage facilities of various enterprises, so as to control the source, grasp the development direction of agriculture and industry and the establishment of relevant sewage facilities, so as to reduce the production and living activities River pollution caused by movement. The strict regulation of industrial facilities in coastal rural areas also promotes the adjustment of industrial structure to a certain extent, improves the local industrial model, promotes the technological innovation and creation of coastal industries, forms a certain circular economy, and finally reduces the water environmental pollutants along the Lijiang River. The standardization of industrial structure in rural areas will also promote the construction and improvement of the surrounding rural sewage facilities, thus forming a complete sewage treatment network, improving the local rural environmental status and protecting the water resources of Lijiang River.

#### **4.3. Enhance Supervision And Establish Rural Water Environment Archives**

At the same time, it is necessary for all departments to carry out regular inspection and investigation to ensure the standardized production of later activities. According to the scattered characteristics of Lijiang village, the author thinks that the relevant departments can take the village as the unit, carry out regular and regular supervision and inspection, and establish water environment archives according to the inspection situation of each area, so as to facilitate the management department to carry out self inspection, summary and induction after certain work, and carry out systematic analysis on the water environment changes in various regions. It can improve the mobility and emergency ability of corresponding departments, find out the source of water environmental problems in various areas through sorting out and analyzing the water environmental pollution in rural areas, and lay the foundation for the later treatment work; on the other hand, it can also enhance the villagers' awareness of environmental protection and promote the implementation of environmental protection measures in the later stage.

Green water and green mountains are golden mountains and silver mountains. Environmental protection is the direction of current national development. As the main source of Guilin people's production and living water and an important part of the development of the tertiary industry, Lijiang River occupies an irreplaceable position in the hearts of local people. At present, many scholars and experts in our country put forward their own views and views on the development status and existing problems of rural water environment, and expressed relevant opinions. At the same time, the author also hopes to explore a water environment protection road suitable for the development of the rural areas along the Lijiang River, improve the local water environment

structure, improve the current situation of the Lijiang River water environment, and promote the coordinated development of the local environmental system.

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