

The Status Quo and Countermeasures of Environmental Pollution Control in Rural China

Zhou Li

Guiyang Nursing Vocational College, Guiyang, 550081, Guizhou, China

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Abstract: For a long time, China's investment and attention to the city in environmental governance is far greater than that in rural areas. The backward environmental governance structure and infrastructure have led to a growing contradiction in the ever-expanding pollution load in rural areas, which has directly led to a significant increase in rural environmental problems. Therefore, this paper analyzes the current situation of rural environmental governance in China, and proposes relevant countermeasures for rural environmental pollution control, which is conducive to meeting the requirements of rural economic development and achieving coordinated social and economic development in urban and rural areas.

1. Research Background

1.1 Literature review

In recent years, along with the rapid development of the rural aquaculture and planting industry, rural pollution sources such as agricultural film, domestic garbage, chemical fertilizer, agricultural film and industrial wastewater have gradually aggravated the environmental pollution, seriously undermining the balance of the rural ecological environment, which is not conducive to Rural economic development. By studying the current situation of rural environmental pollution and proposing countermeasures to promote the sustainable development of rural economy in response to different pollution situations, it has become an important measure to build a new rural China (Shi and Zhang, 2016). Under the background of continuous social and economic development, the people's living standards have improved remarkably, but the environmental pollution problem has gradually increased, which is not conducive to the healthy living of rural residents. By analyzing the current situation of rural environmental pollution and proposing effective improvement countermeasures, it can provide specific reference suggestions for rural environmental protection work (Zhang, 2016). Under the background of China's rapid economic development, the rural environment has been affected by different factors, and the water and soil pollution is serious. It has caused great troubles for residents' lives and seriously damaged the health of residents. Based on the analysis of the status quo of rural water pollution in China, the corresponding countermeasures for water pollution reasons are provided, which can provide reference for rural water pollution control (Jiang, 2014). Against the background of the increasing environmental pollution in rural China, rural environmental governance has received extensive attention in different fields. Based on the status quo of environmental pollution, China has always insisted on strengthening environmental protection work, but most of them focus on urban environmental protection and neglect rural environmental protection projects. In this context, the problem of rural environmental pollution has brought many adverse effects to the construction of new rural areas, and has also deeply affected the normal life of residents. By analyzing the current situation of rural environmental pollution and based on the environmental pollution problem, the relevant countermeasures for rural environmental governance are proposed, which has important theoretical value for accelerating the pace of new rural construction (Cao, 2018).

1.2 Purpose of research

In recent years, the rural environment in China is still in a very serious state. The environmental

pollution problem threatens the lives and health of residents. It restricts the further advancement of China's urbanization process and seriously hinders the good and healthy rural economy. The development is not conducive to social harmony and stability and long-term stability (Wang, 2015). Therefore, by analyzing the specific situation of China's rural environment, the current situation of rural environmental pollution is explained, and the causes of environmental pollution are further analyzed. Based on different reasons, the main countermeasures for rural environmental pollution control are proposed. Development has important guiding significance and is conducive to promoting the pace of rural ecological civilization construction.

2. Analysis on the Status Quo and Causes of Environmental Pollution in Rural China

2.1 Environmental pollution caused by crop production

At present, in the modern crop production process, a series of substances that can effectively promote the increase of crops, such as fertilizers, plastic film and pesticides, are increasingly favored by farmers, and China has become the country with the most fertilizers (Li and Bao, 2013). However, in the actual use process, farmers' awareness of environmental protection is not strong. When using chemical fertilizers, plastic film and pesticides, there are still problems in inappropriate use and unreasonable use methods, resulting in the use of harmful substances such as fertilizers and pesticides. It has seriously exceeded the national minimum standards and the environmental pollution problem is outstanding. According to relevant data surveys, the current use of fertilizer per hectare of land in rural areas has exceeded 400 kg, of which fertilizers only volatilized by 40%, seriously exceeding the national requirements for fertilizer limits (Liu, 2015). Under this influence, rural land has experienced the decline of cultivated land quality, land agglomeration and waste of resources. At the same time, some nutrients in chemical fertilizers that are not completely absorbed may enter the water body with different media such as rainwater, resulting in eutrophication in rural water bodies, and the rural ascending system is seriously out of balance. The large-scale use of pesticides by rural residents, although it can reduce crop pests and diseases to a certain extent, can increase crop yields, but the environmental pollution consequences are also becoming more serious. Most of the pesticides will remain in the soil, and some will enter the atmosphere, forming acid rain, which not only affects the quality of life of the residents, but also destroys biodiversity, laying a safety hazard for the health of rural residents.

2.2 Environmental pollution caused by improper disposal of domestic garbage

The lifestyle of rural Chinese residents generally adopts a family and a yard. The living space is relatively large and the overall layout is relatively scattered. However, due to the relatively large population base of rural residents in China, the amount of domestic waste discharged is also large. According to relevant statistics, Chinese rural residents can produce about 8 billion tons of domestic sewage per year, resulting in about 1.2 billion tons of domestic garbage. Due to the relatively weak awareness of environmental protection among rural residents, there is basically no awareness of environmental isolation, resulting in a relatively poor system of rural domestic sewage discharge, and there are no restrictions on the location and discharge methods, resulting in environmental pollution problems. In addition, after a large amount of domestic garbage is produced in the countryside, residents have basically not adopted any scientific and effective treatment methods. The treatment of some domestic garbage is relatively sloppy, and even directly stacked in an open environment, seriously affecting the air quality in rural areas. The problem of rural environmental pollution has become more serious.

2.3 Environmental pollution caused by livestock farming

Previously, the scale of China's rural aquaculture industry was relatively small, and the treatment of accumulated manure was also quite different from the current treatment methods. Most of the livestock manure was used as a farmer's fertilizer for secondary use, which did not have a major impact on environmental pollution. However, with the continuous improvement of China's

economic level, the scale of the rural aquaculture industry has gradually expanded, and the aquaculture industry has generally adopted intensive and specialized farming methods. In the actual breeding process, a large amount of livestock and poultry manure is produced. However, the current rural farmers lack the ability and knowledge to deal with the manure of livestock and poultry. They generally vaguely discharge livestock manure directly into the natural environment like some chemical fertilizers, causing large-scale environmental pollution problems, resulting in The environmental pollution problems of lakes, rivers and the like in rural areas are serious, and some fish, shrimps and other organisms die directly. Even pollutants directly enter the underground system, which has a greater impact on groundwater, and residents produce various diseases after drinking. According to relevant statistics, there are about 300 million rural residents in China who are unable to drink pure water, and the mortality associated with water pollution is gradually increasing. In addition, the ventilation facilities of some farms are not perfect, and it is easy to cause harmful substances to accumulate indoors, breeding a large number of microorganisms, and related pollutants will be converted into bacteria into the human body, which is a serious threat to human health.

2.4 Environmental pollution caused by industrial production

Due to cost considerations, many companies choose to build in the countryside. In the actual operation process, these enterprises have made certain contributions to the development of the rural economy, but also caused great damage to the rural ecological environment. In order to reduce the cost of environmental governance, some enterprises directly discharge pollutants into nature, causing serious pollution to land, atmosphere and water resources, and potentially endangering the health of residents. For example, a mining limited liability company directly discharged untreated industrial wastewater during the trial production process, resulting in serious pollution of the reservoir in the area, affecting the drinking water quality of about 50,000 people. Another example is the illegal production of a biochemical products company, which seriously damages the local groundwater system, causing serious pollution of the local groundwater, and about 81 residents in the vicinity are hospitalized. Due to improper business operations or improper handling of environmental pollution sources, there are numerous cases of rural environmental pollution problems. Therefore, the environmental pollution caused by the production of enterprises must be highly valued by relevant departments.

3. China's rural environmental pollution control countermeasures

3.1 Strengthen the rational layout of treatment of cultured pollutants

Local governments should strengthen the rational layout of aquaculture pollutants, and encourage some breeding enterprises or farms to stay away from residential areas, especially away from residential water sources. In the process of aquaculture production, it is necessary to strengthen the monitoring of pollutants, and use the corresponding sewage treatment facilities to treat the manure of livestock and poultry. After proper treatment, the corresponding pollutants are tested. When the test indicators meet the requirements of the state, they are allowed to proceed. emission. At the same time, relevant departments should strengthen the comprehensive utilization of livestock and poultry excrement, improve the methods of removal of livestock and poultry excrement while improving the methods of cultivation and planting, encourage individuals or enterprises to establish biogas fields, and promote the recycling of livestock and poultry emissions. In addition, the relevant departments should formulate pollutant discharge standards for farms, strengthen the supervision of the breeding environment, use local relevant standards as reference materials, formulate livestock manure discharge standards, farm environmental regulations and technical operation specifications, etc., and require relevant personnel to be strict. Perform the appropriate actions according to the standard. If there is an aquaculture enterprise, the enterprise should be required to meet the aquaculture standards and use the organic feed that meets the standard for breeding. No additives can be added to avoid pollution to the water body, and the

development of the rural aquaculture industry towards ecological agriculture can be realized.

3.2 Enhance farmers' awareness of environmental protection

Local governments should actively carry out various forms of environmental protection publicity activities in rural areas based on the situation that rural residents are not aware of environmental protection, and promote the popularization of environmental protection knowledge among peasant masses. For example, the village government can organize residents to conduct environmental protection lectures, and encourage each farmer to pay more attention to environmental pollution issues and gain an in-depth understanding of environmental protection knowledge. At the same time, relevant departments should publicize the relevant knowledge of environmental protection by posting posters and setting up bulletin boards in rural areas. In order to form an atmosphere for everyone to carry out environmental protection and everyone's supervision of environmental protection, relevant departments can set up a reporting platform, publicly report telephones and mailboxes, and encourage residents to report real names or anonymously to some individuals or groups with environmental pollution to enhance the environment of rural residents. Protection awareness. In addition, rural educational institutions should strengthen environmental protection education in schools, take educational institutions as an entry point, cultivate students' awareness of environmental protection, and establish a sense of mission for residents to consciously protect the environment.

3.3 Promote agricultural science and technology and actively develop ecological agriculture

If we want to alleviate the problem of rural environmental pollution, we must vigorously develop ecological agriculture. In the rural areas, actively promote the cultivation of pollution-free, green and organic agricultural products, encourage rural residents to establish pollution-free, green and organic agricultural production bases, and vigorously develop ecological agriculture. For example, in the process of crop planting, local governments should encourage residents to use bio-fertilizers and bio-pesticides instead of traditional fertilizers and pesticides to minimize the use of chemical fertilizers and pesticides, so that not only can environmental pollution be reduced during crop production, but also It can promote the development of rural economy, combine ecological agriculture with the rural economy, and help to form a green countryside.

3.4 Strengthen environmental pollution supervision

In many rural areas, environmental pollution often comes from some industrial enterprises. Therefore, different institutions should strengthen supervision of related enterprises. In the process of enterprise operation, enterprises should be required to build supporting facilities for environmental pollution control. If a single enterprise cannot bear the cost of environmental management, the enterprise can be relocated to some industrial parks, which is conducive to centralized treatment of environmental pollutants. For some large and medium-sized aquaculture enterprises, the location of enterprises should be kept away from the residential areas to prevent the pollution caused by the voluntary discharge of livestock and poultry manure. At the same time, it is necessary to provide technical support to relevant enterprises, increase the proportion of manure returning to the field, and minimize the adverse impact of environmental pollution on residents' lives. In addition, different local governments should establish a sound environmental protection responsibility system, clarify the division of labor between different environmental protection departments, strengthen law enforcement, and strictly require relevant departments to carry out law enforcement in accordance with the corresponding laws and regulations. If it is found that environmental violations are not within the jurisdiction of the department, it should promptly contact the relevant departments, take the form of joint law enforcement, and strictly control the rural environmental pollution.

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Highly aggressive people understand the neural mechanism of others”(15YJC190031)

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