Research on Cooperative Protection Mechanism of Ecological Environment

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Abstract: This article aims to study the cooperative protection mechanism of the ecological environment. By using the method of literature analysis to understand the history and development of the ecological environment and collaborative protection. By making a comparison between domestic and abroad research environmental, we learn more protection methods. As the environment for human living, the ecological environment is affected by many factors such as population growth, economic growth and capital investment. Under the situation of social diversification, a collaborative protection mechanism mainly led by enterprises. The way of society and enterprises participate in it together has been proposed. In this regard, we believe that citizens should firmly establish the concept of collaborative governance. The government should integrate multiple forces to coordinate and co-administer the protection of the ecological environment. Departments at all levels should jointly improve the collaborative governance mechanism of the ecological environment.

1.Introduction
Improving the living environment is related to the building of a well-off society in an all-round way and the process of building a beautiful China. It is a major decision made by the Party Central Committee from a strategic and overall perspective, and is a key task in implementing the rural revitalization strategy. The environment is changing day by day, and the environmental governance system and governance model need to be reformed to adapt to the complex environmental governance status quo. The government-led environmental governance model has gradually exposed its shortcomings and is no longer suitable for current social governance. Governance of the ecological environment should also be achieved through coordination and cooperation of various entities in order to achieve maximum effectiveness. Cooperative governance is intended to give full play to the advantages of each subject and realize the governance effect of "the overall function is greater than the sum of the parts" of the ecological environment. Collaborative governance theory is an emerging research achievement and development trend in the field of public affairs governance research.

2.Research status at home and abroad
Eco-environmental governance has always been favored by experts and scholars in different fields in academia, and theories and methods in different fields have been used for analysis and research. The first relevant standard for the ecological environment came from the United States. In the 1940s, the American people made serious protests against the outbreak of two serious air pollution incidents.
Twenty years later, the United States formulated relevant laws around the issue of environmental governance [1]. At the same time, Japan and the European Union have also established corresponding departments for environmental governance to carry out environmental protection related work [2]. Ecologist Wolfgang Lutz proposed that the ecological environment is a combination of human and natural factors [3].

The awareness of governance of the ecological environment in our country appeared late [4]. In the past 10 years, my country's ecological environment governance has entered a more mature optimization stage [5]. Researchers such as Li Li proposed that the combination of organic environment and inorganic environment constitutes the ecological environment [6]. Zhou Zhaomei, Li Qiang, Zhang Chungui and Li Jiying all concluded through research and analysis that population increase is the main influencing factor of the ecological environment [7]. Zhang Zilong believes that the higher the degree of openness of a city, the easier it is to improve its ecological environmental performance [8].

The overall national ecological environment quality has been improved, the environmental air quality improvement results have been further consolidated, the water environment quality has continued to improve, soil environmental risks have been basically managed and controlled, and the overall ecosystem pattern has been stable. The data are as follows [9]:

![Figure 1: Inter-annual comparison of the concentration of six pollutants in 2019](image)

**Figure 1** Inter-annual comparison of the concentration of six pollutants in 2019

![Figure 2: Proportion of national surface water quality categories from January to October 2020](image)

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| Table 1 Forestry governance changes |
|------------------------------------|
|                                    |
|                                    |
| Forest area ( hm² )                |
| 2010: 5909.92                      |
| 2018: 7 203.51                     |
| 2019: 23.0                         |
| Forest cover rate ( % )            |
| 2010: 21.6                         |
| 2018: 23.0                         |
| Total forestry output value ( 100 million yuan ) |
| 2010: 2 575.03                     |
| 2018: 5432.61                      |

Its ecological environment has an important influence on the country's sustainable development. William Reggie and James Boman proposed that "collaborative governance" is an environment where participants can exercise their own rights and interests in a diversified environment [10]. With the development of the economy, the state's official affairs have become more and more complicated. The support of enterprises in the past is no longer sufficient to provide assistance in environmental governance, and Western scholars believe that society should join the ranks of collaborative governance in the same way as enterprises.
3. Problems In Collaborative Governance Of Ecological Environment

3.1 Failure to establish the concept of coordinated ecological environment management
The sense of collaboration among the participating entities is the foundation of the collaborative governance system. Only when multiple parties have the sense of collaboration at the same time can they form governance synergy. In practice, farmers have weak awareness of ecological and environmental protection, lack of relevant knowledge, and inconsistent knowledge and behavior. Lead to insufficient participation in collaborative governance. Farmers are the main body of ecological environmental protection and governance in rural areas, and the establishment of ecological environment awareness and the concept of ecological civilization is the key to the construction of ecological civilization. At the same time, enterprises lack a correct understanding of the ecological environment, and pursue their own interests far higher than the maintenance of the ecological environment in public areas, and mistakenly believe that the governance of the ecological environment should be unilaterally led by the government.

3.2 The cooperative governance system of the cooperative main body has not been established
The collaborative governance of the ecological environment is an open and transparent ecosystem, and the grassroots administrative system has obvious bureaucratic characteristics, with obvious hierarchies, and is excluded from openness and transparency [11]. In terms of environmental governance, the government, enterprises, and society have a weak foundation for mutual cooperation, which limits the formation of collaborative models, and makes environmental collaborative governance lose its diversified unity and transform into a single local government-led. Legal means are the means used in large numbers by government departments. Reflected in the general direction of environmental governance by government departments in policy and planning. When the government governs a single entity, once the division of responsibilities is not clear, other subjects are restricted in participating in the management of public affairs, and it is difficult to establish a coordinated ecological environment governance system.

3.3 The cooperative governance operation mechanism is not sound
In view of different ecological environments, it should be problem-oriented, public interest as the appeal, and the use of current resources to develop a mechanism that suits local conditions. The government's institutional policies and environmental monitoring are only one of the means of cooperative governance, and source governance and comprehensive governance are the fundamentals for realizing the effectiveness of rural ecological environment governance. The diversified subjects of ecological environment governance failed to coordinate their respective governance methods and means through equal consultations to perform their duties, resulting in imperfect collaborative governance mechanisms, lack of source governance and comprehensive governance links. Some companies occupy most of the resources, but their operating conditions are not good. The construction of ecological civilization is weak in driving force.

3.4 Eco-environmental coordination facilities are not high
Waste gas, wastewater, and solid waste caused by industrial production cannot be treated well due to the low level of technical equipment. Although many enterprises are expanding rapidly in scale, they are under great resource pressure. The level of environmental protection technology and equipment is not high, and the level of environmental technology is relatively lagging. Insufficient investment in safety and environmental governance infrastructure and weak technological innovation capabilities of technical equipment are likely to cause illegal sewage discharge. As far as problem management is concerned, the government requires most companies to build related pollution control facilities for the "three wastes" through rigid regulations. However, due to the low level of technology and backward technology in pollution control, the results of environmental governance of existing equipment are not satisfactory. Ability is severely insufficient.
4.Countermeasures and suggestions to improve ecological environment coordination management

4.1 Firmly establish the concept of collaborative governance

The collaborative governance of the ecological environment aims to build a collaborative relationship between the government and society, mobilize the enthusiasm of the whole society through equal communication, and work together to build an ecological civilization. Citizens, like enterprises, are not born with the willingness to consciously participate in the governance of social public affairs. Collaborative governance emphasizes the cooperation of multiple collaborative entities and opposes the one-way order of a single entity in order to obtain the public's recognition and willingness to participate in public affairs. Respect the equal governance status of multiple subjects, coordinate the conflicts of interest between the subjects, and guide the mutual respect and equal negotiation and negotiation between the subjects. Form a governance network based on multi-party cooperation and reach a good consensus among the general public to jointly build an ecological civilization.

4.2 Integrating multiple forces, co-governing and protecting the ecological environment

The government must adapt measures to local conditions, do a good job in the overall planning and layout of environmental construction, and formulate environmental policies and environmental laws and regulations. The government should sum up the experience of various aspects of ecological environment governance, and let the pilot demonstration projects play a point-by-point radiation effect and stimulate the endogenous power of environmental governance. Establish an information disclosure system for environment-related projects to protect the relevant rights and interests of residents. Encourage residents to actively participate in environmental engineering construction and promote democratic decision-making. Provide incentives and rewards to green enterprises to promote the sustainability of environmental protection behaviors. Promote corporate transformation and develop new models of corporate environmental management.

4.3 Improve the coordinated governance mechanism of the ecological environment

If governments want to do a good job of linkage and coordination, it is necessary to establish a common ecological civilization construction goal and maintain the balance of interests of all parties. Ensure that the exercise of the power of each subject is fair and just, and the staffing and treatment of all levels of departments are fully guaranteed, so that the subjective initiative of each subject's environmental governance can be maximized. Establish a linkage mechanism between governments at all levels. Strengthen the cooperation of relevant government departments, perform their duties, coordinate and assist each other, give full play to the joint role of ecological environmental pollution remediation, and promote the effective development of ecological environmental protection. Establish a law enforcement linkage mechanism and launch joint law enforcement operations.

4.4 Improve the level of facilities for coordinated ecological environment management

Enhance environmental technology innovation capabilities to improve environmental quality and enhance the level of environmental technology innovation. Cultivate senior talents in environmental protection, and research and develop environmental management technologies suitable for the local area. In industry, strengthen the research and development of key technologies, collect data, and build models. In this way, we can improve the level of environmental technology and equipment and optimize production methods. In agriculture, promote low-volume spray technology, develop high-efficiency, low-toxicity and low-residue pesticide products, and promote their use throughout the county. Persist in the simultaneous innovation of science and technology and systems and mechanisms.
5. Conclusion

Our country's governance of the ecological environment should be based on a deep understanding of country's national conditions and the actual conditions of the ecological environment in various places. The governance requires us to improve the cognition of multiple governance roles, coordinate the behavior of multiple entities, build a collaborative governance mechanism, improve the level of environmental protection facilities and improve the collaborative model. The coordinated management of ecological and environmental problems in accordance with local conditions can promote the improvement of ecological environmental governance and the optimization of the governance system, accelerate the process of ecological civilization construction, and benefit all mankind.

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