

Research on Co-construction and Sharing of Regional Ecological Environment Governance

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Abstract: *This paper aims to explore the mechanisms of co-construction, co-governance, and sharing in regional ecological environment governance, in order to promote ecological civilization construction and sustainable development. The concept and significance of regional ecological environment governance were elaborated, emphasizing the importance of joint construction, governance, and sharing. By analyzing the connotation and practical path of co-construction, co-governance, and sharing, this paper explores the roles and responsibilities of government, enterprises, social organizations, and the public in regional ecological environment governance. Summarized the effective practices and achievements of co-construction, co-governance, and sharing in regional ecological environment governance. Policy recommendations and future prospects have been proposed to promote the co construction, co-governance, and sharing of regional ecological environment governance, aiming to provide theoretical support and practical guidance for ecological environment governance work.*

Keywords: *regional ecological environment governance, co-construction, co-governance, ecological civilization, sustainable development*

1. Introduction

In today's society, with the advancement of economic globalization and the acceleration of population urbanization, regional ecological and environmental problems are becoming increasingly prominent, posing severe challenges to sustainable human development [1]. As one of the fundamental conditions for the common survival of life on Earth, the severity of ecological and environmental problems cannot be ignored [2]. Therefore, strengthening regional ecological environment governance and achieving joint construction, governance, and sharing has become a global consensus. This paper aims to focus on the theme of "co construction, co-governance, and sharing of regional ecological environment governance", and deeply explore how to build a regional ecological environment governance model of cooperation, co-construction, multi-party governance, and sharing and win-win. Co-construction focuses on establishing a governance mechanism with collaborative participation of multiple stakeholders, while co governance focuses on strengthening the sense of responsibility and behavioral norms of all stakeholders. Sharing focuses on achieving fair sharing and sustainable development of ecological environment governance achievements.

This paper will review the current research status at home and abroad, analyze the basic principles of regional ecological environment governance and the concept of co-construction, co-governance, and sharing, explore the roles and responsibilities of government, enterprises, and the public in regional ecological environment governance, summarize successful cases, and conduct comparative studies, in order to provide theoretical guidance and practical reference for improving regional ecological environment governance.

Through the research in this article, we hope to promote the in-depth development of regional ecological environment governance, promote the construction of ecological civilization, achieve a positive interaction between economic development and ecological environment protection, and contribute to the construction of a beautiful China and a beautiful world.

2. Concepts and principles of regional ecological environment governance

2.1 Definition of regional ecological environment governance

With the rapid development of human society and the continuous urbanization process, regional ecological environment problems are becoming increasingly prominent, posing a serious threat to human society and natural ecosystems. Regional ecological environment governance refers to the implementation of a series of comprehensive and long-term measures and actions within a specific geographical area, through cooperation and coordination among all parties, with the goal of promoting the protection, restoration, and improvement of the ecological environment, in order to achieve sustainable development and harmonious coexistence between humans and nature [3].

Regional ecological environment governance involves the participation of multiple levels and stakeholders, including government departments, enterprises and institutions, community organizations, professional institutions, and the general public. It needs to cross the boundaries of administrative jurisdictions and departments to optimize the allocation and utilization of ecological resources as a whole, improve the stability and ecological functions of ecosystems, and effectively respond to climate change and environmental risks.

2.2 Analysis of the concept of co-construction, co-governance, and sharing

Co-construction, co-governance, and sharing are the core concepts of regional ecological environment governance. Co-construction emphasizes the cooperation of all parties in building an ecological and environmental governance system, forming a pattern of diverse participation and collaborative promotion. All stakeholders should jointly assume responsibility, leverage their respective strengths, and form a joint force in resource utilization, environmental management, and other aspects. Co-governance emphasizes clarifying the responsibilities and obligations of all parties, and establishing a governance mechanism with multi-party cooperation and clear rights and responsibilities. The government plays a guiding and regulatory role in governance, enterprises and institutions actively fulfill their social responsibilities, and the public participates in decision-making and supervision, forming a good governance pattern. Sharing emphasizes fair sharing of governance achievements and promotes sustainable development. This means that in ecological environment governance, attention should be paid to protecting and improving the public and collective value of the ecosystem, ensuring fair distribution of resources and sustainable development of society. At the same time, it is also necessary to strengthen information sharing and knowledge dissemination, and improve public environmental awareness and participation.

2.3 Basic principles of regional ecological environment governance

2.3.1 Ecological priority principle

Regional ecological environment governance should adhere to the principle of ecological priority. The ecosystem is the foundation for human survival, therefore, protecting and restoring the ecological environment should be given top priority to ensure the sustainable use of natural resources and the healthy development of the ecosystem. The principle of ecological priority means that when formulating and implementing various policies, the protection and restoration of the ecological environment must be fully considered. This requires fundamentally changing the traditional resource development model and placing ecological civilization construction at the core of economic and social development. Through scientific planning and rational layout, natural resources such as land, water, and energy are utilized reasonably to minimize damage and pressure on the ecosystem. The principle of ecological priority also requires strengthening the protection and restoration of ecosystems. By establishing systems such as nature reserves, biodiversity reserves, and ecological red lines, we aim to protect rare and endangered species and ecologically sensitive areas, and maintain the integrity and stability of the ecosystem. At the same time, we actively promote ecological restoration projects, restore damaged ecosystems such as wetlands, forests, and grasslands, and enhance ecological functions and service capabilities. In the process of promoting ecological priority in regional ecological environment governance, it is also necessary to strengthen environmental monitoring and evaluation, establish a sound legal and regulatory system and regulatory mechanisms, and increase efforts to crack down on environmental violations. At the same time, we enhance the environmental awareness and sense of responsibility of the whole society by guiding and motivating enterprises and the public to participate in ecological environment protection. Only by adhering to the principle of ecological

priority and placing ecological environment protection at the core of economic and social development, can the sustainable and long-term goals of regional ecological environment governance be achieved. This is not only for the well-being of the current people, but also for a better future for future generations. Through joint efforts, we can build a beautiful home with good ecology and abundant resources.

2.3.2 Comprehensive governance principles

We should adhere to the principle of comprehensive governance. Ecological and environmental issues are comprehensive, involving multiple fields and levels, and require collaborative efforts from multiple departments to form an overall force in order to effectively solve them. All parties should strengthen communication and coordination, form a joint force, and promote the comprehensive implementation of comprehensive governance measures. Comprehensive governance means crossing departmental boundaries, breaking down fragmentation, and achieving resource sharing, information sharing, and shared responsibility. In ecological environment governance, it involves multiple aspects such as land use, water resource management, air quality improvement, and biodiversity conservation. It requires close cooperation among relevant departments to form a holistic thinking and action plan. In comprehensive governance, it is important to strengthen coordination and cooperation among government departments, establish a cross departmental joint meeting system, form a decision-making coordination mechanism, and ensure the connection of policy measures and the supervision of their implementation effects. At the same time, it is also necessary to encourage government departments at all levels to engage in extensive cooperation with various sectors of society, enterprises, and the public, jointly participate in ecological environment governance, and form a sense of shared responsibility and action force for the whole society. In addition, comprehensive governance also needs to focus on scientific and technological support, fully utilize information technology means, establish an ecological environment data sharing platform, strengthen the construction of monitoring and evaluation and early warning systems, and provide scientific basis and technical support for decision-making. Only through comprehensive governance can we truly achieve fundamental solutions to problems and achieve sustainable development and protection of the ecological environment. Comprehensive governance is not only a way, but also a concept and methodology. Only by adhering to the principle of comprehensive governance, forming a joint force, and promoting various work in coordination, can we effectively solve ecological and environmental problems, achieve sustainable economic and social development, and achieve a virtuous cycle of ecological environment. Let's work together and contribute our efforts to building a beautiful China and a beautiful home.

2.3.3 Principles of scientific decision making

Regional ecological environment governance is a complex system engineering that requires full reliance on scientific data and research results to formulate scientifically reasonable policies and plans to ensure the scientificity and operability of decision-making. Scientific decision-making requires analysis and evaluation based on sufficient and accurate data and information. We obtain scientific data on the current status, problems, and their causes of the ecological environment through environmental monitoring, investigation, and professional evaluation, and scientifically interpret and analyze the problems. At the same time, it is necessary to combine academic research achievements in relevant fields, draw on domestic and foreign experiences and wisdom, and form a scientific decision-making foundation. Scientific decision-making also needs to focus on interdisciplinary and comprehensive research. The solution to ecological and environmental problems often requires knowledge and methods from multiple disciplines such as natural sciences, social sciences, and engineering technology. Therefore, it is necessary to establish an interdisciplinary research team, integrate various professional forces, conduct interdisciplinary comprehensive research, and provide comprehensive and systematic scientific basis for decision-making. In scientific decision-making, it is also necessary to strengthen the construction of risk assessment and early warning mechanisms. Ecological environment governance involves many uncertain and complex factors, therefore risk assessment is needed to predict potential problems and risks, and provide scientific risk management strategies for decision-making. At the same time, it is necessary to establish a timely and accurate warning mechanism to monitor and warn potential ecological and environmental risks, and take timely measures to avoid and reduce possible losses. Scientific decision-making relies on professional institutions and experts. The government should strengthen the capacity building of relevant departments, cultivate and introduce professional talents in the field of ecological environment, establish and improve consultation mechanisms for scientific decision-making, widely listen to the opinions and suggestions of experts, and ensure the scientificity and impartiality of decision-making. Only by adhering to the principle of scientific decision-making can we make the right choices in regional ecological environment governance, ensure

sustainable development of the ecological environment, and promote a virtuous cycle of economy and society. Let us work together to promote the practice of scientific decision-making and contribute to the construction of a beautiful China and a beautiful home.

2.3.4 Principles of public participation

The public is an important participant and supervisor in ecological environment governance. Their attention and participation in environmental issues not only provide valuable opinions and suggestions, but also enhance environmental awareness and promote the establishment and improvement of public participation mechanisms. Public participation refers to the process of information communication, opinion exchange, and cooperation between the government, enterprises, and the public. In ecological environment governance, public participation can be carried out from multiple levels, including policy formulation, decision-making implementation, environmental supervision, and so on.

By adhering to the principle of public participation, we can enhance the public's awareness and sense of responsibility for ecological environment governance, and create a good atmosphere of common concern and action for the whole society. Public participation will make decision-making more scientific and reasonable, and maximize the effectiveness of environmental governance. Let us work together to promote the establishment and improvement of public participation mechanisms, and contribute to the construction of a beautiful China and a beautiful home.

3. Co-construction: Mechanism construction for regional ecological environment governance

In regional ecological environment governance, co construction is a key link, involving cooperation among all parties to jointly build an ecological environment governance system, forming a pattern of diverse subject participation and collaborative promotion. Co-construction requires the establishment of effective mechanisms, including government led collaborative governance mechanisms, public participation mechanisms, and the role of corporate social responsibility in co construction.

3.1 Government led collaborative governance mechanism

The government plays a crucial guiding and regulatory role in regional ecological environment governance, and its responsibility is not only to lead and coordinate the participation of all parties, but also to actively build a collaborative governance mechanism. To achieve effective ecological environment governance, the government can establish cross departmental and cross industry coordination mechanisms, coordinate planning and resource allocation, and promote cooperation and co construction among various stakeholders. In addition, the government should strengthen law enforcement and supervision to ensure the effective implementation of governance policies and plans, in order to improve governance effectiveness and ensure sustainability. Only when the government plays an active leading role in regional ecological environment governance and implements effective regulatory measures, we effectively promote collaborative efforts among all parties to jointly promote the improvement and sustainable development of the ecological environment.

3.2 Establishment of public participation mechanism

Public participation plays an important role in regional ecological environment governance, enhancing the democracy and transparency of governance activities, and increasing public awareness and participation in ecological environment issues. Establishing a public participation mechanism covers multiple aspects, including but not limited to conducting public education and publicity, organizing public participation in decision-making and supervision, and establishing complaint and reporting channels. The government should actively listen to public opinions, fully respect public rights, establish a good interactive mechanism, and achieve democratization and socialization of the governance process. Only in this way can we ensure the true effectiveness of public participation and promote the continuous development of regional ecological environment governance towards a more democratic, transparent, and socialized direction.

3.3 The role of corporate social responsibility in co construction

Enterprises are an important carrier of productivity and an indispensable participant in regional ecological environment governance. Enterprises should fulfill their social responsibilities, pay attention to ecological environment protection, and actively participate in the governance model of co

construction, co governance, and sharing. Enterprises can reduce negative impacts on the ecological environment and promote ecological civilization construction by reducing emissions, conserving resources, and promoting green production. At the same time, enterprises can also carry out public welfare activities, support environmental protection projects, give back to society, and achieve a win-win situation of economic and environmental benefits.

4. Co-governance: Implementation path of regional ecological environment governance

In the practice of regional ecological environment governance, co governance is a crucial link, involving ecological protection and restoration, pollution control and emission reduction measures, as well as the development and sustainable utilization of ecological industries. These aspects together constitute the implementation path of regional ecological environment governance, providing important guidance and support for promoting ecological civilization construction.

4.1 Ecological protection and restoration

Ecological protection and restoration, as the fundamental work of regional ecological environment governance, aims to protect and restore the function and stability of natural ecosystems. By establishing nature reserves, implementing ecological restoration projects, and promoting ecological compensation mechanisms, effective measures can be taken to protect biodiversity, maintain ecological balance, and enhance the anti-interference ability of ecosystems. In addition, it is necessary to attach importance to ecological environment monitoring and evaluation work, timely identify and solve ecological environment problems, to ensure the sustainable development of the ecosystem. Only through continuous and unremitting ecological protection and restoration work can we effectively improve the quality of regional ecological environment and achieve the health and stability of the ecosystem.

4.2 Pollution control and emission reduction measures

Pollution control and emission reduction measures are key tasks of regional ecological environment governance, aimed at reducing pollutant emissions, improving environmental quality, and ensuring the health of the people. By strengthening pollution discharge permit management, promoting clean production technology, and constructing sewage treatment facilities, measures can effectively reduce pollutant emissions and improve environmental quality. In addition, it is necessary to strengthen monitoring and evaluation work, scientifically set emission reduction targets, promote green development, and achieve a virtuous cycle of economic growth and environmental protection. Only by resolutely implementing pollution control and emission reduction measures can we effectively reduce the impact of environmental pollution on people's health and the ecosystem, and promote the continuous improvement of the regional ecological environment towards a cleaner and healthier direction.

4.3 Ecological industry development and sustainable utilization

The development and sustainable utilization of ecological industries are important ways for regional ecological environment governance, aimed at promoting a positive interaction between economic development and ecological environment protection. By developing ecological agriculture, promoting clean energy, and promoting circular economy, efficient utilization of resources and low-carbon emissions can be achieved, industrial structure optimization and upgrading can be promoted, and sustainable economic development can be achieved. At the same time, it is necessary to strengthen policy support and technological innovation for the ecological industry, stimulate market vitality, and promote the healthy development of the ecological industry.

5. Sharing: Sharing of achievements in regional ecological environment governance

After achieving significant results in regional ecological environment governance, sharing these achievements is crucial, aiming to enable more people to share the benefits of ecological environment improvement and promote the participation of all sectors of society in ecological environment governance work. The improvement of ecological environment quality, evaluation of ecological and economic benefits, as well as the construction of sharing mechanisms and sustainable development are important aspects for achieving sharing.

5.1 Improvement of ecological environment quality

The improvement of ecological environment quality is one of the primary goals of regional ecological environment governance. Through various measures such as pollution control, ecosystem protection, and restoration of ecological functions, the environmental quality of the atmosphere, water bodies, soil, and other areas can be effectively improved, pollutant emissions can be reduced, and the health status of natural ecosystems can be enhanced. The achievements of improving the quality of the shared ecological environment can allow the general public to feel fresh air, clear water sources, and fertile soil, enhancing their sense of identification and achievement in ecological environment protection. Such improvement will not only directly affect people's quality of life, but also lay a solid foundation for future sustainable development, achieving coordinated development of economy, society, and ecological environment.

5.2 Ecological and economic benefit evaluation

The evaluation of ecological and economic benefits is an important basis for sharing the achievements of regional ecological environment governance. By scientifically evaluating multiple indicators such as the service function of the ecosystem, the value of ecological resources, and the improvement effect of the ecological environment, we can comprehensively understand the effectiveness of ecological environment governance and provide reliable references for future decision-making. These evaluation indicators include but are not limited to aspects such as biodiversity conservation, soil moisture retention, climate regulation, air purification, and water quality. At the same time, it is necessary to pay attention to the evaluation of economic benefits, explore the development potential of ecological industries, promote the coordinated development of resource utilization efficiency and economic growth, and achieve a win-win situation of economic and ecological benefits. By evaluating the development of ecological industries, the application effects of green technologies, and the introduction of environmental taxes and fees, the contribution of ecological benefits to economic development can be quantified, and scientific basis can be provided for relevant departments to formulate reasonable policies and measures.

This comprehensive evaluation and consideration can not only help decision-makers better understand the importance of ecological environment governance, but also encourage all parties to actively participate in ecological environment protection and promote the realization of sustainable development. Ultimately, through reasonable evaluation and effective management, ecological and economic benefits will mutually promote and jointly promote regional ecological environment governance towards a healthier and more sustainable direction.

5.3 Construction of sharing mechanism and sustainable development

The construction of a sharing mechanism is an important guarantee for promoting sustainable development of regional ecological environment governance. Establishing a sound information disclosure system, social participation mechanism, and interest coordination mechanism can promote the joint participation of all parties in ecological environment governance work, forming a joint force to promote the improvement and sustainable development of the ecological environment. At the same time, it is necessary to strengthen the combination of sharing mechanisms and sustainable development, promote the deepening of ecological civilization construction, and achieve a virtuous cycle of economic and social development and ecological environment protection.

6. Conclusion

Regional ecological environment governance is a complex and systematic task that requires joint efforts from all parties to achieve the goal of joint construction, governance, and sharing. Co-construction is the foundation of regional ecological environment governance. Only through cooperation and coordination among various stakeholders can a unified governance goal and action plan be formed. In the process of co-construction, the government, enterprises, social organizations, and the public should participate together to form a pattern of multi subject co-construction, achieving optimized resource allocation and coordinated development. Co-governance is the key to regional ecological environment governance. By establishing a sound legal and regulatory system, regulatory mechanisms, and collaborative governance mechanisms, we will strengthen environmental monitoring and evaluation, as well as information transparency, to achieve scientific decision-making and effective

implementation of governance work. Co-governance requires all parties to fully play their roles and form a joint force to promote the implementation and rooting of ecological environment protection work. Sharing is the goal of regional ecological environment governance. The improvement of ecological environment and the enhancement of economic benefits should benefit the general public, allowing everyone to enjoy a clean environment and healthy life. The construction of sharing mechanisms combined with sustainable development can promote the sustainable development of regional ecological environment governance, achieve green economic and social development, and harmonious coexistence between humans and nature.

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