

Sustainable Countermeasures for the Development of Ecological Compensation in the Watershed

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Abstract. As the state and society pays more attention to watershed environment and water ecological environment in recent years, watershed ecological compensation has increasingly become an indispensable part of promoting watershed environmental development and protecting the ecological environment of watersheds. It is not optimistic to look at the current situation of Chinese water ecological environment. In order to practice the concept of green development and protect the environment of the water resources, it is urgent to study the ecological compensation system of the water resources. Here, the connotation and significance of ecological compensation in the river basin are pointed out, and the sustainable suggestions and countermeasures for the development of ecological compensation in the water resources are accordingly put forward.

Keywords. Watershed ecological compensation, sustainable development, suggested countermeasures

1. Introduction

In recent years, the party and society have paid more and more attention to the effective solution of river basin water resources, ecological environmental protection and coordinated economic development. In China, ecological compensation has become a hot issue of widespread concern from all walks of life. From the central to local governments, there is an urgent need to establish a systematic ecological compensation mechanism and policy framework. It can be said that the ecological compensation of the water resources has been raised to an unprecedented height, and the improvement of the ecological compensation system of the water resources has ushered in a golden historical opportunity.

River basin ecological compensation involves many disciplines such as hydrology and water resources, ecology, resources and environmental economics, environmental hydraulics, management, law, etc. [1]. In the construction of river basin ecological compensation, the interests of stakeholders should be coordinated, and the ecological compensation should be carried out in accordance with the principle of “beneficiaries pay”, which will help to implement the ecological policy concept of “green water and

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green mountains are golden mountains and silver mountains". To provide impetus for the sustainable and coordinated development of ecological protection and economy in the river basin.

2. The Connotation of River Basin Ecological Compensation

River basin ecological compensation is a sub-concept that extends from the concept of ecological compensation. As a derivative concept of ecological compensation, it is also commonly referred to as river basin water resources ecological compensation, river basin water uses ecological compensation, etc. These names have very similar connotations. Generally speaking, a series of political, economic, social, cultural, and ecological activities are carried out to protect the water resources and ecological environment in the basin and balance the interests of relevant subjects in the basin [2]. But in particular, in addition to the general content of the concept of ecological compensation, it also has the unique connotation of river basin water resources. First of all, river basin ecological compensation is similar to other types of ecological compensation. Both embody the use of surplus to make up for the deficiencies, allowing the beneficiaries of ecological services in the region to provide benefit compensation and repair for the injured, and to benefit the ecological benefits of water resources through institutional norms. The entire river basin, so as to achieve the benign development of the entire region's ecological environment. Secondly, due to the mobility of water resources, it is determined that river basin ecological compensation should pay more attention to dynamic balance and mutual benefit compared with other types of ecological compensation. Finally, river basin ecological compensation is essentially to maintain the ecological interests and economic benefits of all parts of the basin, realize the coordination and complementation of interests among various regions, and finally realize the overall ecological restoration and benefit sharing of the basin area.

3. The Significance of the Development of Ecological Compensation in the River Basin

3.1. The Urgency of Establishing a Water Ecological Compensation

With the continuous acceleration of China's industrialization process and the rapid economic development, simultaneously, the resources shortage, environmental destruction, and the sharp decline of biodiversity and other ecological and environmental resource problems cannot be underestimated. This highlights the fundamental and controlling status of water resources in the ecological environment system [3]. To this end, we must accelerate the construction of water ecological civilization and focus on solving the problem of water resources protection. This is an important link in achieving the construction of ecological civilization. Meanwhile, it must be clearly understood that the construction of ecological civilization not only depends on the construction of basic projects, but also cannot be separated from the guarantee of various national policies and systems. So as to ensure the ecological safety of the river basin and the sustainable use of water resources, in recent years, China has gradually tried to adopt river basin ecological compensation measures in the practice of water ecological protection [4]. The

existence of the problem has caused an increasing shortage of water resources, which has seriously affected the ecological environment and society. For this reason, promoting ecological compensation in the water resources will become one of the long-term and significant mechanisms for building ecological civilization.

3.2. The Importance of Establishing a Water Ecological Compensation

As we all know, the Party Central Committee has attached great attention to the construction of ecological civilization, and the establishment of ecological compensation for river basins is also the consistent requirement of the central government [5]. The Party Central Government stated that the strictest ecological and environmental protection system. Improve the overall coordination mechanism in the field of ecological civilization. The above move will promote a more mature and finalized ecological civilization system [6]. It can be seen from that China must resolutely implement the central decision-making and deployment, further strengthen the ecological compensation related to water resources, and make the ecological compensation mechanism of the river basin mature to maintain water ecological safety and reverse water. The environment continues to deteriorate, promote the sustainable development of the ecological environment of the water resources, resolve the contradiction between economic and social development and environmental issues, accelerate the transformation of economic development mode, towards a new level of health and sustainability.

4. Countermeasures and Suggestions for Sustainable Development of Ecological Compensation in the River Basin

4.1. Enhancing the Important Role of Market Mechanism in Ecological Compensation of River Basins

At present, Chinese water ecological compensation mechanism is still dominated by the government, which mainly relies on the government to provide compensation funds, which are completed through financial transfer payments. Therefore, while carrying out the water ecological compensation of the river basin, it is necessary to gradually transform from a unified approach to a diversified approach [7]. Introduce market compensation into the practice of water ecological compensation mechanism, and combine the two organically, this can effectively compensate for the shortcomings of government compensation and help improve the integrity and coordination of the river basin ecological compensation system. We also should give more attention to the important regulatory role of the market mechanism in the allocation of resources, build a set of government, market, and personal diversified compensation systems when making legislation, and broaden the source channels of the capital chain. From the point of view of market enterprises, such as fishery, water conservancy, waterway transportation, etc. The beneficiary has been transformed from the beneficiary to the payment object, and the principle of “who benefits, whoever compensates” is strictly followed [8]; The services provided by the river basin ecosystem directly or indirectly benefit from them. In a large area, most of them enjoy the “watershed public products” for free. They should also pay the corresponding ecological compensation fees, which also fully reflects the “users” Pay, beneficiaries compensate principle. In the end, the government will lead the compensation, and the market-assisted compensation will

gradually shift to a market-based compensation, supplemented by government compensation. This will ultimately lead to a double harvest of ecological and economic effects.

4.2. Improving the Systems and Systems Related to Ecological Compensation in the River Basin with Clear Rights and Responsibilities

River basin ecological compensation will involve conflicts between various units and even between different provinces, counties and cities. The emergence of these problems makes it necessary to establish an effective basin ecological compensation dispute resolution mechanism [9]. In order to promote the full cooperation between watersheds in different regions and promote mutual exchanges, forums and hearings can be adopted to convene all levels of government and stakeholders related to water resources in the river basin. This relatively complete platform has It is helpful to promote the settlement of disputes and interests between governments at all levels on the ecological compensation of the river basin, and each perform its own duties to promote the better development. In addition, it is urgent to establish an effective monitoring mechanism. This includes the establishment and improvement of the monitoring mechanism for the collection of ecological compensation fees in the river basin, the monitoring mechanism for the use of ecological compensation funds in the water resources, the information disclosure system for the implementation of ecological compensation in the water resources, the implementation of the public application and fair review mechanism for the implementation of ecological compensation projects in the water resources, and the watershed ecological compensation fund operation benefit evaluation system and other related institutional mechanisms [10]. The above-mentioned technical and standardized institutional physique is more conducive to greatly improving the effectiveness of the practical work of various river basin ecological compensation mechanisms.

4.3. Increasing Public Participation in Water Resources Management Mechanisms in River Basins

China is in a period of upgrading and transformation of economic development. If the contradictions and problems in the water resources of the river basin are not handled properly, it will hinder the sustainable development of China's social economy. New ways of social governance require extensive public participation, which is conducive to the general handling of ecological and environmental issues, and is conducive to the development of environmental democracy and science. To this end, stakeholders of water resources ecological compensation should be invited to actively participate in the public platform, including representatives of residents and individuals and companies to participate in the development of ecological compensation in the river basin. In the operating supervision procedures, the media tools of the information age, such as radio, television, and network media, are also correspondingly fully utilized to make relevant information public and institutionalized, and involve the public, and work together to protect the water ecological environment can mobilize. The whole society shall fulfill the legal obligations of protecting water resources and environment in accordance with the law, and build a green and beautiful home together.

5. Conclusion

With China's increasing emphasis on water ecological civilization, river basin ecological compensation has become an indispensable link in strengthening the ecological construction of water resources in the river basin. In the future, more attention should be paid to the sustainable development and utilization of water resources in the river basin to realize the ecological resources of the river basin. To achieve the sustainable development of ecological resources in the river basin, build a green and beautiful home, and accelerate the promotion of China's socialist ecological civilization to a new level.

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