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Analysis on the System of Compensation for Eco-environmental Damage

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Abstract The eco-environmental damage compensation system is not only an important part of the central government's *Overall Plan for the Reform of Ecological Civilization System* and special plan, but also a blank point and weak link in the construction of eco-environmental protection system. From the construction of ecological civilization system, the fragility of ecological environment and the history of past damage, the comparative analysis of relevant laws and regulations, and the connotation of the concept of ecological environment, this paper expounds the importance, urgency and necessity of the reform of eco-environmental damage compensation system and the technical complexity of damage compensation judgment. In accordance with the local legislation and practical cases in the reform of eco-environmental damage compensation system in Shaanxi Province, this paper puts forward legislative and policy suggestions to accelerate the reform of eco-environmental damage compensation system.

Key words Ecological environment, Compensation for damage, Legislation, System

1 Introduction

In the *Decision of the CPC Central Committee on Upholding and Improving the National Governance System and the Modernization of Governance Capacity*, which was examined and adopted at the Fourth Plenary Session of the 19th CPC Central Committee, it further expounds the socialist rule of law system with Chinese characteristics and the ecological civilization system, and requires that we should pay close attention to the much-needed system of national governance clearly defined by the CPC Central Committee and the system necessary to meet the people's new expectations for a better life. It is required to give full play to the important role of the system in guiding the direction, standardizing behavior, improving efficiency, maintaining stability, preventing and defusing risks.

The *Party Constitution* clearly stipulates that the Communist Party of China leads the people in building a socialist ecological civilization, and it is necessary to establish the ecological civilization concept of respecting, adapting to and protecting nature, enhance the awareness that green mountains and clear waters are wealth, adhere to the basic national policy of saving resources and protecting the environment, adhere to the policy of giving priority to saving, protecting and restoring nature, and adhere to the civilized development path of production development, affluent life and good ecology. Efforts should be made to build a resource-saving and environment-friendly society, implement the strictest eco-

environmental protection system, form a spatial pattern, mode of production, and way of life that conserve resources and protect the environment, and create a good production and living environment for the people, to realize the sustainable development of the Chinese nation.

The compensation system for eco-environmental damage is an important part of the eco-civilization system and an important part of the modernization of eco-environmental governance system and governance capacity. However, from the perspective of the construction of the current legal system, it is still a weak point and blank point. We must fully reflect the realization, maintenance and development of the fundamental interests of the overwhelming majority of the people by speeding up the reform, practice and innovation of the compensation system for eco-environmental damages, highlight the nature of the national system and national governance system that strives to ensure and improve people's livelihood, embody the common will of the people, and protect the legitimate rights and interests of the people, and effectively curb and prevent the frequent occurrence of "enterprises breaking the law, the masses being victimized, ecological destruction, and the government paying the bill", so as to effectively protect the ecological environment.

2 Importance of the construction of eco-environmental damage compensation system from the construction of ecological civilization system

The 18th CPC National Congress proposed that we should speed up the construction of ecological civilization in view of the tightening of resource constraints, serious environmental pollution and the deterioration of the ecosystem. The Political Bureau of the CPC Central Committee examined and adopted the *Opinions on Speeding Up the Construction of Ecological Civilization*, and the Central Leading Group for Comprehensively Deepening Reform ex-

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amined and approved the *General Plan for the Reform of Ecological Civilization System*, which clearly put forward the need to construct the property right system of natural resources assets, the system of land and space development and protection, the system of spatial planning, the system of total management of resources and the system of comprehensive conservation, the system of paid use of assets and ecological compensation, environmental governance system, environmental governance and ecological protection market system, ecological civilization performance assessment and accountability system, and constitute a system of ecological civilization system with clear property rights, extensive participation, equal emphasis on incentives and constraints.

So far, the special plan for the reform of the ecological civilization system has been issued and implemented, including *Pilot Program for the Departure Audit of Leading Cadres' Natural Resources Assets*, *Measures for the Investigation of the Responsibility for Ecological Environmental Damage of Party and Government Leading Cadres (for Trial Implementation)*, and the *Reform Plan for the Compensation System for Ecological Environmental Damage* and so on. In particular, the report of the 19th CPC National Congress clearly put forward the need to "speed up the reform of the ecological civilization system and build a beautiful China", taking the system reform and institutional recommendations as the main focus of promoting ecological civilization.

It should be pointed out that in accordance with the spirit of the strict implementation of the compensation system for those responsible for eco-environmental damage clearly proposed at the Third Plenary Session of the 18th CPC Central Committee, the General Office of the CPC Central Committee and the General Office of the State Council issued the *Pilot Plan for the Reform of the Compensation System for Ecological Environmental Damage in 2015*, pilot reforms were deployed in seven provinces and cities, including Jilin, and remarkable results have been achieved. In order to further speed up the construction of the eco-environmental damage compensation system nationwide, on the basis of summing up the practical experience of regional reform pilot projects, the *Reform Plan of Ecological Environmental Damage Compensation System* was formulated, examined and adopted at the 38th meeting of the Central Leading Group for Comprehensively Deepening Reform on August 29, 2017, issued by the General Office of the CPC Central Committee and the General Office of the State Council on December 17, 2017.

The overall objectives and requirements of the *Reform Plan of Ecological Environmental Damage Compensation System* implemented since January 1, 2018 are to try out the ecological environmental damage compensation system nationwide, further clarify the scope of compensation for ecological and environmental damage, the subject of liability, the subject of claim, the solution of compensation for damage, and so on, so as to form the corresponding appraisal and evaluation management and technical system, financial guarantee and operation mechanism, gradually establish a system of repair and compensation for damage to the ecological environment and speed up the construction of ecological civilization.

By 2020, we will strive to initially build a nationwide ecological damage compensation system with clear responsibilities, smooth access, technical norms, strong protection, compensation and repair in place^[1].

According to the situation of Shaanxi Province, the General Office of Shaanxi Provincial CPC Committee issued the implementation plan for the reform of eco-environmental damage compensation system in Shaanxi Province on September 20, 2018. Shaanxi Provincial Government held a video conference on July 21, 2020 to promote the reform of eco-environmental damage compensation system, with responsible persons from the government of each district, Hancheng municipal government, Yangling demonstration area and Xixian New District, and responsible persons from all member units of the leading group for the reform of the provincial eco-environmental damage compensation system attended the meeting, and responsible persons from the Environment Protection and Resources Conservation Committee of the Provincial People's Congress, the Provincial Procuratorate, and the Provincial Court were invited to attend the meeting. The meeting stressed that the reform of the compensation system for eco-environmental damage entered a crucial stage, and all governments and relevant provincial departments should clearly define their responsibilities, speed up the establishment and improvement of the system, and form a strong joint force. It is necessary to speed up the practice of handling cases, start with sorting out the clues of eco-environmental damage cases, and make full use of consultation and litigation means to achieve full compensation. It is necessary to strengthen the restoration and management of the ecological environment, restore its due ecological functions, and effectively protect the rights and interests of the public in the ecological environment^[2].

The above background processes and requirements are sufficient to illustrate the importance of the construction of eco-environmental damage compensation system to accelerating the construction of ecological civilization and to the construction of ecological civilization system, as well as the importance of constructing eco-environmental damage compensation system itself. This requires sufficient understanding, solid work, improvement on the consciousness and initiative of system construction and system reform, and we must not take it lightly and slack off.

3 Urgency of the reform of eco-environmental damage compensation system from the fragility of ecological environment and the history of past damage

Taking Shaanxi Province as an example, northern Shaanxi, southern Shaanxi and Guanzhong all show the characteristics of eco-environmental fragility. In the national ecological functional zoning, northern Shaanxi is an important area of soil conservation in the hilly and gully region of the Loess Plateau, which is characterized by high sensitivity to soil erosion and land desertification. The main ecological problems in this area are the low vegetation coverage and the weak function of the ecosystem to conserve soil and water caused by the exploitation of coal and oil resources, such as serious slope soil erosion and gully erosion, which serious-

ly affect the ecological security of the middle and lower reaches of the Yellow River. Southern Shaanxi is an important ecological functional area of biodiversity conservation and water conservation in Qinling – Dabashan Mountains. With serious soil erosion and wide area distribution, southern Shaanxi is one of the sensitive areas of soil and water loss in China. At the same time, it is also one of the representative regions of biodiversity in the world, where all the problems of alpine ecosystem are gathered, which increases the difficulty of ecological vulnerability and biodiversity protection. The ecosystem in Guanzhong area is also relatively fragile, and the resource and environmental constraints are intensified. The ecological conservation and ecological construction of the "three regions" have a long way to go, and the damage to the ecological environment is the "great enemy" of the "three regions". The characteristic that the ecological environment fragile area is easy to destroy and difficult to recover determines the importance and urgency of constructing the eco-environmental damage compensation system to maintaining its own healthy development, safe development and sustainable development in the eco-environmentally fragile area.

At the same time, from the previous eco-environmental damage cases in Shaanxi Province, Shaanxi is also a frequently-occurring area of eco-environmental damage cases. Some experts have analyzed 10 sudden environmental incidents of water pollution, 8 cases of leakage of flammable and hazardous waste chemicals, 2 cases of food and radioactive contamination, and 2 cases of pest infection in Shaanxi Province before 2008. Some of these cases have alarmed the senior leaders of the central government and ministries and commissions. In the past three or five years, due to the collapse of tailings pond and the rupture of oil pipelines, the eco-environmental damage cases of polluted farmland in villages and towns in Guanzhong have also attracted the attention of provincial departments and localities. All have been put on the agenda, but at the same time, they have become thorny problems troubling all parties, from which we deeply feel the urgency and necessity of constructing the eco-environmental damage compensation system.

4 Necessities of constructing the compensation system for eco-environmental damage from the comparative analysis of relevant laws and regulations

(i) The Fourth Plenary Session of the 18th CPC Central Committee clearly proposed the establishment of a system for procuratorial organs to initiate public interest litigation, pointing out that for the cases causing infringement or danger of infringement of national and social public interests, such as cases of ecological environment and resource protection, it is impossible for them to bring public interest litigation because it has no direct interest with citizens, legal persons and other social organizations, and public interest litigation is initiated by procuratorial organs. In practice, procuratorial organs can bring environmental public interest litigation as plaintiffs, help environmental pollution victims or plaintiffs in environmental public interest litigation bring lawsuits, which

defines the object of public interest litigation, and formally implements "public interest litigation" as a litigation system.

(ii) The *Environmental Protection Law*, which came into force on January 1, 2015, provides for the principle of "liability for damage" (Article 5 and 6) and the legal liability for damage for the first time. It gives provisions on the acts that pollute the environment, destroy ecology and harm social and public interests for the first time, and social organizations may bring a suit before a people's court in accordance with the provisions of the law (Article 58). It also stipulates that the limitation period for bringing an action for compensation for environmental damage is three years, calculated from the time when the parties know that they have suffered damage (Article 66). At the same time, it stipulates that anyone who causes environmental pollution or ecological damage shall bear tort liability in accordance with the relevant provisions of the *Tort Liability Law* (Article 64).

However, the *Environmental Protection Law* does not specify that the State should establish and improve the compensation system for ecological environmental damage as "Article 31: The State establishes and improves the compensation system for ecological protection.", "Article 17: The State establishes and improves the environmental monitoring system.", "Article 44: The State implements the total emission control system for key pollutants.", and "Article 26: The State implements the target responsibility system and assessment system for environmental protection.", which shows that there is no principle of "liability for damage" in the *Environmental Protection Law* to the corresponding compensation system for ecological environmental damage. At the same time, in the articles regarding acts of polluting the environment, destroying the ecology and harming the social and public interests (Article 58) and damage caused by pollution of the environment and destruction of the ecology (Article 64), the degree, scope, connotation and difference of environmental pollution and ecological damage are not clearly defined, so it is difficult to implement, difficult to judge and grasp^[3].

(iii) Chapter VII Environmental Pollution and Ecological Destruction Liability, Part VII Tort Liability of this year's newly promulgated *Civil Code* is different from that of the *Environmental Protection Law*. First, it clearly distinguishes between "causing damage to others due to environmental pollution and ecological destruction" (Article 1 229) and "causing damage to ecological environment in violation of state regulations" (Articles 1 234 and 1 235); the second is to put "eco-environmental damage" as a legal concept into the law for the first time; third, for the first time, it is clearly defined that "eco-environmental damage" refers to "loss of eco-environmental service function" and "permanent damage to eco-environmental function" (Article 1 235); fourth, it provides for the terms and conditions of eco-environmental damage repair and compensation for the first time (Article 1 234, Article 1 235).

The *Civil Code* has made a breakthrough in solving the obstacles restricting the system and mechanism of ecological civiliza-

tion, and made a breakthrough in the reform of the compensation system for eco-environmental damage. The comparative analysis of relevant laws and regulations further illustrates the necessity of constructing the compensation system for eco-environmental damage^[4].

5 Technical complexity in the judgment of eco-environmental damage compensation from the connotation of the concept of ecological environment

(i) Section 1, Article 26 of the current *Constitution of China* stipulates that the State protects and improves the living environment and ecological environment, and prevents and controls pollution and other public hazards. Section 2, Article 9 stipulates that the State ensures the rational use of natural resources, protects precious animals and plants, and forbids any organization or individual to seize or destroy natural resources by any means. Section 1, Article 9 stipulates that natural resources such as mineral deposits, currents, forests, mountains, grasslands, unreclaimed land and beaches are owned by the State, that is, by the whole people. These provisions lay a constitutional foundation for the national and social environment and natural resources protection activities, and give the highest legal effect and legislative basis. At the same time, they also provide guiding principles and legislative basis for environmental and resource protection legislation.

(ii) Article 2 of the *Environmental Protection Law* stipulates that the environment referred to in this Law refers to the totality of various natural and artificially transformed natural factors affecting human survival and development, including atmosphere, water, oceans, land, mineral deposits, forests, grasslands, wetlands, wildlife, natural relics, cultural relics, nature reserves, scenic spots, cities and villages. The definition of "environment" in the *Environmental Protection Law* itself reflects the dual characteristics of the definition of environment: it is both environmental and resource-related; it is both natural environment and natural resource; it is both natural environment and artificial environment; it is not only the living environment of human beings, but also the living environment of organisms; it is not only the ecological environment of human beings, but also the natural ecological environment.

(iii) In China's domestic academic circles, there are many definitions of ecological environment, and it mainly refers to various ecological factors that affect the development of ecosystem, that is, environmental conditions. Ecological environment in environmental science refers to human ecological environment, it is a part of human ecosystem, reflecting the impact of human activities. Human ecological environment embodies the interaction of natural factors and social factors. Ecological environment should be the unity of natural ecological environment and social ecological environment. At present, a series of eco-environmental problems and environmental pollution faced by human beings are all related to their own behavior, and the regulation and control of human misbehavior is the key to the realization of regional sustainable development. This involves the construction of ecological civilization

system and mechanism construction and system reform, including the construction of eco-environmental damage compensation system, as an important legal means of regulation and control^[5].

(iv) With regard to the ecological environment function, according to the environment, there are water ecological environment function, wetland ecological environment function, desert ecological function, *etc.*; according to the ecosystem, there are forest ecological function, grassland ecological function, nature reserve ecological function, *etc.*; according to the concept of ecosystem service, there are ecological environment supply service function, regulation service function, cultural service function and support service function.

From the above definition of the ecological environment and the analysis of the function of the ecological environment, the investigation and evaluation of the economic loss of the destruction of ecological environment, the loss of ecological environment function and the permanent damage to ecological environment function is a complex technical system of identification, quantitative evaluation and management. This is because the ecological environment is a comprehensive system containing many elements. In this system, we regard the destruction of the ecological environment as a systematic process, analyze the changes of the structure and function of the ecosystem after one or more elements are damaged by human, and the interactive and restrictive relationship between various elements and the corresponding impact on the economic system, and calculate the economic value of its loss. At the same time, the destruction of ecological environment is a very complex dynamic process, which involves many items and has different characteristics in different ecosystems. These destruction and damage items must be selected and classified, and reasonable parameters, analysis models and calculation methods must be determined^[6-7]. From the above analysis, it can be concluded that at present, under the condition that there is no shortage of cases, it is urgent to further form the technical norms for the loss of economic value of eco-environmental damage through "case-handling practice", and take the economic value loss determined (evaluated) by the technical specification as the basic and reliable basis for compensation.

6 Legislation and policy suggestions on speeding up the reform of compensation system for eco-environmental damage

(i) The *Environmental Protection Law* clearly stipulates that the State shall establish and improve the compensation system for ecological protection (Article 31). It is clearly stipulated that the State shall strengthen the protection of the atmosphere, water and soil, and establish and improve the corresponding investigation, monitoring, assessment and restoration system (Article 32). It is suggested that the provision of "the State establishes and improves the ecological environment damage repair and compensation system" should be added when amending the law, so as to be in line with the acts of polluting the environment, destroying ecology and

harming social and public interests in Article 58 of this Law, the stipulation that social organizations meeting the conditions may bring a suit before a people's court, and the provisions of Article 1 234 and 1 235 of the newly promulgated *Civil Code*.

(ii) The *Regulations on Ecological Environmental Protection of Qinling Mountains in Shaanxi Province* clearly stipulates for the first time that the municipal people's governments shall organize and implement the eco-environmental damage compensation system, designate relevant departments or institutions to be responsible for the specific work of eco-environmental damage compensation, and investigate the liability of units and individuals for damage to the Qinling ecological environment in accordance with the law. With regard to acts that destroy or pollute the ecological environment of the Qinling Mountains, procuratorial organs, other organs prescribed by law and social organizations that meet the requirements may file environmental public interest litigation in accordance with the law (Article 71). It is clearly stipulated for the first time that any unit or individual that violates the provisions of these regulations and causes damage to the ecological environment of the Qinling Mountains shall be liable for compensation for the damage to the ecological environment in accordance with the law. Anyone who violates laws and regulations due to the same ecological environment damage and needs to bear administrative responsibility or criminal responsibility shall not be affected to bear the liability for compensation for ecological damage according to law (Article 83). This is a legislative practice and system reform practice in the construction of eco-environmental damage compensation system in Shaanxi Province. It is an innovative case in the implementation of the *Reform Plan of Ecological Environmental Damage Compensation System* and the *Implementation Plan of the Reform of Ecological Environmental Damage Compensation System in Shaanxi Province*. It is worth summarizing the practices and experiences in determining the scope of damage compensation, the subject of liability, the subject of claim, the solution of damage compensation and so on, so as to form the corresponding appraisal and evaluation management and technical system, financial guarantee and operation mechanism to provide local legislative practice examples for the national legislation to establish the eco-environmental damage compensation system^[8].

(iii) In terms of pollution prevention and control of the Weihe River in Shaanxi Province, since 2006, according to the water environment quality of the city water functional section as the standard, the cross-section water environment quality standard for pollution to downstream city by upstream city has been issued and implemented. The upstream city government carries out pollution compensation to the downstream city government, which is supervised and implemented by the provincial environmental protection department, and the pollution compensation fee is handed over to the provincial financial department for unified supervision. The compensation for eco-environmental damage and pollution in this area directly promoted the standard of the water environment function of the main stream of the Weihe River, and made the wa-

ter quality of the main stream of the Weihe River reach the goal stipulated in the *Plan for the Development of the Economic Zone* two years ahead of schedule in 2018.

In this case of compensation for pollution damage (practice), the subject of responsibility is the city government, that is, the "special legal person" in the *Civil Code*. In the protection of surface water and the water ecological environment function of important rivers, the government and enterprises of the upstream and downstream cities have an important responsibility to protect the water quality. The city government is responsible for the water environment quality in the area under its jurisdiction. It is suggested that the case of pollution damage compensation for special legal person should be systematically summarized and sorted out in the construction of eco-environmental damage compensation system. It will add new and effective legal means and contents to the *Opinions on the Overall Implementation of the River Leader System* in the reform plan of the ecological civilization system.

(iv) As emphasized in the video conference on the reform of eco-environmental damage compensation system in Shaanxi Province on July 21, 2020, the reform of eco-environmental damage compensation system has entered a crucial stage. It is required to speed up the practice of handling cases and effectively protect the ecological and environmental rights and interests of the public. In view of the importance, complexity and arduousness of this system reform, it is suggested that for typical and representative practical cases, experts and scholars from ecological damage assessment institutions and social public welfare organizations should be summoned to hold technical norms exchange meetings and seminars for quantitative assessment, so as to form a strong joint force, a broad consensus on damage compensation and a reliable and credible technical support force.

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