Study on Tax and Fee System of Oil and Gas Resources from the Perspective of Ecological Compensation

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Abstract. The ecological compensation system also implements the concept of intergenerational equity. By actively exploring and perfecting the ecological compensation system, resource-based cities can carry out ecological restoration and restoration in time while developing oil and gas resources, so that the carrying capacity of ecological environment can support the benign development of social economy and environment in resource-based cities, which is of great significance not only to resource-based cities, but also to the sustainable development of the entire oil and gas resources industry. Taking ecological compensation as the breakthrough point, this paper points out the necessity of oil and gas resources tax system from the perspective of ecological compensation, and puts forward some ideas and suggestions, such as levying environmental protection tax, establishing the legal system of ecological compensation for oil and gas resources development, improving the integrity and rationality of oil and gas resources tax system and other guarantee mechanisms.

Keywords: Ecological compensation, Oil and gas resources, Tax and fee system

1. Introduction

It is urgent to accelerate the reform of oil and gas resources taxes and fees, improve the system of oil and gas exploitation rights, and accelerate the construction of oil and gas taxes and fees system, so as to improve the efficiency of oil and gas resources and promote the healthy development of oil and gas industry [1]. In oil-rich areas, it has become an important and urgent task for the country to solve the contradiction between oil resources development and ecological environment protection. By actively exploring and perfecting the ecological compensation system, resource-based cities can carry out ecological restoration and restoration in time while developing oil and gas resources, so that the carrying capacity of ecological environment can support the benign development of social economy and environment in resource-based cities, which is of great significance not only to resource-based cities, but also to the sustainable development of the entire oil and gas resources industry.

2. Overview of oil and gas resources tax theory

The reform of oil and gas resources tax system generally refers to the comprehensive improvement of the whole tax system. First of all, we must have a clear understanding of the current oil and gas resources tax system, that is, to understand the purpose, essence, object, scope and importance of various taxes; At present, the tax system of China's oil and gas resources mainly includes resource tax, mineral resources compensation fee, special oil income, mining right use fee and price [2]. The royalties are levied according to the annual output of oil and gas and the corresponding rates of each oil and gas field [3], collected in kind by the tax authorities, withheld by oil and gas field operators, and subject to differential adjustment and progressive tax rates [4]. Mineral resources compensation fee is a kind of form that the state, as the owner of mineral resources, realizes its ownership property rights and interests. The absolute land rent for the use of mineral resources collected by the state from the mining right holder is similar to foreign royalties to make up for the lack of state investment in resource exploration and the reduced value of mineral resources caused by mining. The compensation fee for mineral resources can compensate the value of mineral resources, realize the benefits of national ownership and, to a certain extent, compensate the intergenerational value of resources. However, because there is no differential rent, the situation that mineral resources developers and users abandon poverty and adopt wealth cannot be fundamentally curbed [5].
3. Problems existing in the current tax and fee system of oil and gas resources

3.1 Lack of ecological compensation concept
The development of oil and gas resources causes resource loss, environmental pollution, ecological damage and regional development capacity damage, so it is necessary to take preventive measures before development, immediate compensation during development and restorative compensation after development [6]. Due to the complicated definition of property rights of some environmental resources, the vague legal provisions, the difficulty in resource pricing, the difficulty in internalizing the cost of oil and gas and other environmental resources, and the lag of legislation itself, China has not yet established a scientific ecological compensation standard for oil and gas resources development at the legal level, which has increased the difficulty of ecological compensation in practice. It can be seen that the subject, object and standard of ecological compensation for oil and gas resources development need to be comprehensively and scientifically defined in legislation.

3.2 Ecological compensation fees are not standardized
Ecological compensation itself has a cross-disciplinary and cross-departmental comprehensive attribute, but in China, resource management is separated from environmental management, resource management is divided according to different elements, and there are many policies and documents in various localities and departments, which is difficult to reflect this attribute [7-8]. In order to protect local economic interests, some local governments do not levy or underpay resource taxes and mineral resources compensation fees for oil and gas development enterprises, while others divert special funds for ecological compensation for other purposes. Without the financial guarantee, the ecological compensation for oil and gas resources development can not be really implemented. Therefore, we should further standardize the tax system related to ecological compensation through legislation, gradually eliminate the disadvantages of setting these taxes and fees, and make them systematic and standardized.

3.3 The design of tax and fee system for oil and gas resources is unreasonable
The current tax and fee system of oil and gas resources in China has some problems, such as the confusion of tax and fee positioning and unclear function. In order to realize its functions, the state collects taxes compulsorily and free of charge by means of tax tools in accordance with the law by virtue of political power, and it is a form in which the state participates in the distribution and redistribution of national income and social products. From the name of taxes and fees, there are many kinds of taxes and fees in China, and the interests of state ownership have not been realized. Mining royalties and resource taxes play the role of "royalties" in foreign oil and gas resources systems, which is also not worthy of the name. Therefore, it can be concluded that in the current tax system of oil and gas resources in China, the positioning of taxes and fees is chaotic and the design is extremely unreasonable.

4. Reform orientation of tax and fee system of oil and gas resources based on ecological compensation

4.1 Levy environmental protection tax
Environmental taxes and fees can be divided into broad sense and narrow sense. Environmental taxes and fees in a broad sense, also known as "related environmental taxes and fees", refer to the general name of related environmental taxes and fees levied or accrued for the purpose of protecting the environment and effectively developing resources to regulate environmental pollution and resource utilization, including special taxes and fees, related taxes and tax concessions [9], and the specific types of taxes and fees are shown in Figure 1.

Environmental protection tax should be added to the existing tax system, and air pollution, water pollution and marine pollution caused by oil and gas exploitation should be included in the tax scope to achieve the goal of environmental protection. Environmental protection tax should be added to the existing tax system, and air pollution, water pollution and marine pollution caused by oil and gas exploitation should be included in the tax scope to achieve the goal of environmental protection. The design of resource tax rates should consider regional economic differences. The higher the economic coefficient, the higher the tax rate, and vice versa. By considering regional economic differences, regional discounts for oil and gas enterprises can be achieved.
Considering the current statistical technology, tax cost and other factors, it is suggested that the discharge of pollutants is more appropriate as the basis for tax calculation. This will help oil and gas enterprises to minimize waste emissions by improving pollution control technology, and urge oil and gas enterprises to scientifically choose appropriate pollution prevention and control methods and optimize resource allocation.

### 4.2 Establishing the legal system of ecological compensation for oil and gas resources development

In the process of ecological compensation, the ecological interests are damaged due to the exploitation of oil, natural gas and other resources. Therefore, the mining areas of oil, natural gas and other resources should be given ecological compensation; On the other hand, the ways and specific methods of ecological compensation should be legal and reasonable, and we should pay attention to the implementation degree of ecological compensation, and the ecological compensation fee should not be higher than the cost of environmental management in mining areas.

The energy law should regulate the behavior of energy development and utilization as a whole, stipulate the establishment of a specific ecological compensation mechanism for energy development, and the governments at all levels are responsible for approving the mining area management and ecological restoration plans of energy development projects, and clarify the ecological responsibilities of energy development enterprises [10]. If the provisions of local laws and regulations violate the above-mentioned legal provisions, they should be revised in time. The legal system of ecological compensation for oil and gas resources is a comprehensive application of ecological compensation theory in the fields of environmental law and energy law, and their reasonable connection is conducive to realizing the legal and social effects of ecological compensation.

### 4.3 Improve the integrity and rationality of the tax and fee system for oil and gas resources

The ecological compensation system also implements the concept of intergenerational equity. Intergenerational equity means that the development of contemporary people cannot exceed the carrying capacity of the ecosystem at the expense of the development opportunities of future generations. The construction and implementation of the ecological compensation system for petroleum resources aims at reducing the damage of petroleum resources developers and users, preventing the uncontrolled development and inefficient use of petroleum resources, and polluting and destroying petroleum resources in the development and utilization of petroleum resources, so as to realize the recovery and protection of petroleum resources. Justice should be reflected not only in the distribution of contemporary people's interests, but also in the justice between man and nature.

Resource exhaustion subsidy reflects the hidden loss and future loss brought by the exhaustion of resources to enterprises, which should be linked to the market price of oil and gas, and can be levied according to a certain proportion of sales income, adopting sliding ratio and formulating corresponding preferential policies. The exploitation of resources will inevitably lead to environmental damage, and the ultimate loss is borne by the residents where the resources are located. Incorporating compensation for residents into the tax system of oil and gas resources not only stays at the level of local government management and land acquisition, but also considers the opportunity cost brought to residents by development activities in combination with the actual situation of oil and gas development.

In order to treat oil and gas field enterprises fairly, it is necessary to consider different tax rates for different resource grades, optimize resource allocation, protect high-quality resources and encourage the utilization of inferior resources, and adopt preferential tax policies for high-quality oil and gas and low-quality oil and gas. The development stage of oil and gas fields is regarded as the coefficient that affects the dynamic tax rate, so that the preferential tax policy can be comprehensively reflected through the dynamic tax rate. In order to enhance the competitive strength of domestic oil and gas enterprises, accelerate the pace of overseas development, encourage and support China oil companies to go overseas, and raise the threshold of special income is suitable for oil companies to accumulate funds, develop the capital demand of overseas markets, and better focus on the country's "going out" development strategy.

### 4.4 Constructing the mechanism of returning oil and gas resources taxes and fees

At present, in the income distribution system of oil and gas mining rights, the state intends to use taxes and fees to balance the interests of all parties, but in practice, the unreasonable distribution of taxes and fees makes it difficult to coordinate the interests of all parties. In the face of non-renewable and eventually exhausted oil and gas resources, how to distribute them fairly and justly is
the primary issue of intra-generational equity. The interference caused by human beings to nature, especially the interference caused by the transformation of natural overload by human beings as supernatural beings, should be borne by human beings to restore or rebuild the ecosystem and repair its functions. Under the background of vigorously developing oil and gas resources, serious damage to the ecological environment and increasingly prominent social contradictions, we should establish a tax refund mechanism for mineral resources, and focus on resource areas when distributing tax revenue, so as to greatly increase the expenditure of distributable taxes and fees for environmental governance and ecological restoration projects in mining areas. Construct a mechanism for returning the resource land of royalties, increase the proportion of resource land in royalties, and use it exclusively for the governance and restoration of the ecological environment of oil and gas resource land. Compensate and return the resource export areas, and raise more funds for the ecological environment restoration and governance of the resource export areas, so as to ensure the sustainable development and supply of oil and gas resources.

5. Conclusions

Ecological compensation itself has a cross-disciplinary and cross-departmental comprehensive attribute, but it is difficult to reflect this attribute in China, where resource management is separated from environmental management, resource management is divided according to different elements, and there are many policies and documents in various localities and departments. Ecological compensation for oil and gas resources is to apply the concept of ecological compensation to the fields of environment and energy, and the reasonable relationship between them will help to give full play to its legal and social effects. The ecological compensation system for petroleum resources is a system that conforms to ecological principles, reflects economic principles and realizes legal justice, and is a system with profound theoretical basis.

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