

Study on Environmental Protection Effect of Local Ecological Transfer Payment

-- Take 68 Key Ecological Functional Areas in Anhui Province as an Example

Yanan Liu^{1,*}, Dong Liu¹, Jinyang Wang¹, Deyu Li²

¹School of Finance and Public Administration, Anhui University of Finance and Economics, Bengbu 233030, China

²School of Economics, Anhui University of Finance and Economics, Bengbu 233030, China

*Corresponding author: 2245138841@qq.com

Abstract

Local ecological transfer payment is one of the important measures to strengthen ecological civilization construction in China, and plays a key role in promoting local ecological environment protection and restoration. This paper takes 68 key ecological functional areas in Anhui Province as research objects, evaluates the impact of local ecological transfer payment on environmental protection through field investigation and data analysis, and finds that local ecological transfer payment can improve ecological environment quality in ecological functional areas, Therefore, it is suggested that the government strengthen the supervision and evaluation of the use of funds and formulate more scientific and reasonable policies and measures to ensure that local ecological transfer payments can better play an environmental protection effect.

Keywords

Local ecological transfer payment; Environmental protection effect; Anhui Province; Key ecological functional areas; Ecological civilization construction.

1. Introduction

1.1. Background

Local ecological transfer payment refers to an ecological compensation mechanism between the central government and local governments, aiming at promoting environmental protection and ecological construction through the adjustment of financial funds. In recent years, with the continuous deepening of ecological civilization construction in China, local ecological transfer payment has gradually become one of the important policy means of the government. As one of the more developed regions in China, Anhui Province has rich ecological resources and important ecological functional areas. For Anhui Province, It is of theoretical and practical significance to strengthen the environmental protection effect of local ecological transfer payment.

1.2. Research status of local ecological transfer payment at home and abroad

At present, scholars at home and abroad have made certain achievements in the research on local ecological transfer payments. In foreign countries, the United States, Germany and other countries began to implement ecological transfer payment policies in the field of environmental protection as early as the 80s of the last century, which provided valuable experience for domestic related research. In China, the relevant research mainly focuses on the use of

ecological transfer funds by local governments, and the impact of transfer payment on environmental protection performance and ecological environment improvement. However, most of the existing studies focus on a single region or a single case, which is limited, and lacks a comprehensive and in-depth understanding of the overall effect of ecological transfer payment policies in different regions and different types of places.

1.3. Research content and structure arrangement

This paper analyzes the differences in the effects of local ecological transfer payment policies on environmental protection in 68 key ecological functional areas of Anhui Province, and deeply discusses the mechanism and influencing factors behind ecological transfer payment, as well as the challenges and problems faced by the government in the implementation of ecological transfer payment. Through case studies and data analysis, this paper evaluates the actual effect of local ecological transfer payment in environmental protection, and puts forward suggestions for improvement, in order to provide reference for the government to further improve the ecological transfer payment policy and improve the environmental protection effect.

2. Basic information on Local Ecological Transfer Payments

The scale of payment is constantly increasing, and the objects are extremely wide. In recent years, the scale of local ecological transfer payments has increased year by year, and the central government has successively introduced a series of support policies to increase financial support for ecological and environmental protection. At the same time, the objects of local ecological transfer payments involve more regions and areas with fragile ecological environment, especially areas with poor ecological environment quality, which have received more attention and support.

Payment methods are gradually improved, and standards are constantly optimized. At present, the payment method of local ecological transfer payment has gradually changed from one-time allocation to regular allocation or special fund allocation to ensure the sustainable use of funds and the smooth progress of ecological and environmental protection work. At the same time, the standards of local ecological transfer payments are becoming more and more refined and scientific, and accurate calculations are carried out according to the environmental pressures and protection needs of different regions, so as to better achieve the goal of ecological and environmental protection.

The evaluation mechanism of payment effect is gradually improved. With the continuous promotion of local ecological transfer payments, relevant departments have also established a complete set of effect evaluation mechanisms to monitor the use of funds and the effect of environmental protection, and ensure the effective use of funds and the improvement of the ecological environment.

3. Environmental Protection Status of 68 Key Ecological Functional Areas in Anhui Province

There are 68 key ecological function zones in Anhui Province, including nature reserves, wetland reserves, water source protection areas, forest ecosystem protection areas and cultivated land ecological function areas. These areas play an important role in protecting the ecological environment, maintaining biodiversity, and ensuring ecological security. However, due to the impact of socio-economic development and human activities, these key ecological function areas still face some environmental protection problems.

3.1. Resource development and utilization

In some areas, there are illegal mining activities, such as illegal mining and illegal logging, resulting in serious waste of resources and damage to the ecological environment. Illegal mining activities not only damage the local ecosystem, but also seriously affect the sustainable development of the region.

Deforestation. In some areas, there is indiscriminate deforestation, large-scale cutting of forest resources, resulting in land desertification, soil erosion, ecological balance destruction and other problems. Indiscriminate deforestation not only destroys the ecological environment, but also threatens local ecological security and social stability.

Overexploitation of cultivated land resources. In order to increase the output of agricultural products, there are over-reclamation and exploitation of cultivated land resources in some areas, resulting in the reduction of cultivated land area, the decline of land quality, and the destruction of ecosystems. The overexploitation of cultivated land resources not only affects the ecological environment, but also may lead to farmland degradation and ecological imbalance.

The contradiction between the development of mineral resources and ecological protection. In resource-rich areas, there is often a contradiction between the exploitation of mineral resources and ecological protection. In order to pursue economic interests, some enterprises blindly exploit mineral resources, which aggravates the problems of resource depletion and ecological environment destruction. It is necessary to strike a balance between the protection of the ecological environment and the development of resources, and promote green and sustainable development.

3.2. Contaminated water quality

In order to reduce production costs, some industrial enterprises have the situation of directly discharging sewage or untreated wastewater into water bodies. These industrial wastewater contains harmful substances such as heavy metals and organic compounds, which seriously pollute water sources and endanger ecosystems and human health.

Agricultural non-point source pollution. Agricultural inputs such as fertilizers and pesticides used in agricultural activities enter water bodies through runoff or seepage from farmland, resulting in serious water pollution. Agricultural non-point source pollution not only causes eutrophication and algal bloom outbreaks, but also threatens water security for aquatic organisms and humans.

Urban domestic sewage discharge. The domestic sewage of urban residents contains various organic wastes and harmful substances, and if the sewage treatment facilities are not perfect or not working well, they will be directly discharged into the water body to cause water pollution. The discharge of urban domestic sewage can also lead to problems such as eutrophication and bacterial pollution of water bodies.

Wastewater discharge from heavy industries such as coal mines and smelting. There is a large amount of wastewater discharge in heavy industry, which contains a large number of heavy metal pollutants and high concentration of wastewater, which causes serious pollution to water quality. These heavy metals are toxic to aquatic organisms and pose a serious threat to the water environment and water security.

Groundwater contamination. With the acceleration of urbanization and the increase of industrial and agricultural activities, groundwater pollution is becoming more and more prominent. The pollution of groundwater mainly includes surface runoff infiltration, chemical and agricultural infiltration, domestic wastewater infiltration, etc., resulting in the decline of groundwater quality and affecting the safety of drinking water and ecosystem balance.

3.3. Ecosystem degradation

Forest ecosystems and wetland ecosystems have been damaged and ecosystem functions have declined due to overgrazing, overfishing, and land disturbance. At the same time, biodiversity is gradually lost, and ecosystems in some areas are destroyed, resulting in a decrease in the number of species and the loss of biodiversity.

4. Impact of Local Ecological Transfer Payment on 68 Key Ecological Functional Areas

4.1. Ecological and environmental protection

Local ecological transfer payment funds are used to support ecological and environmental protection in key ecological function areas, including ecological restoration, ecological protection, pollution control, etc. This is of great significance for improving the quality of the ecological environment, reducing pollution emissions, protecting biodiversity, and maintaining the balance of the ecosystem.

4.2. Development of ecological industry

Local ecological transfer payment funds can also be used to support the development of ecological industries in key ecological function areas, and enhance local economic benefits and promote sustainable development through the development of green industries, the promotion of ecological agriculture, and the promotion of eco-tourism. The development of ecological industry can not only drive local economic growth, but also reduce the damage to the ecological environment and achieve a win-win situation for the economy and ecology.

4.3. Promote the coordinated development of ecological protection and economic development

The use of local ecological transfer funds can help balance the contradiction between ecological protection and economic development, and achieve the coordinated development of ecological protection and economic development through effective resource allocation. In areas with abundant ecological resources, local governments can strengthen the protection of the ecological environment and promote the adjustment of the industrial structure to achieve sustainable development by increasing investment; in areas with fragile ecological environment, local governments can compensate for the cost of damage to ecological resources and restoration of the ecological environment through transfer payment funds, so as to promote the development of the economy to adapt to the ecological environment.

5. Existing Problems and Recommendations

5.1. Problems and challenges

Although local ecological transfer payments have played a positive role in environmental protection, there are still some problems and challenges, such as the opaque use of funds, and the opaque use of funds and unclear flow of funds may exist in some places, resulting in the inability to effectively monitor and evaluate the benefits of local ecological transfer payments. At the same time, the efficiency of the use of funds is low, and in some places, there may be abuse and waste when using local ecological transfer payment funds, resulting in insignificant capital benefits and failure to achieve the expected ecological and environmental protection effects. In addition, the distribution of funds is unfair, and there may be unfair distribution of funds in some areas, with funds tending to be tilted towards economically developed areas, while financial support for areas with fragile ecological environment is insufficient, resulting in a decline in ecosystem carrying capacity.

5.2. Take Measures

Establish a fund supervision mechanism, strengthen the supervision and evaluation system for the use of local ecological transfer payment funds, ensure that the use of funds is transparent and the flow direction is clear, and improve the degree of supervision of all parties on the use of funds. At the same time, improve the incentive mechanism: establish a performance appraisal mechanism, set up incentive measures according to the ecological environmental protection and resource utilization in various regions, urge local governments to improve the efficiency of the use of ecological transfer payment funds, and increase the scientificity and effectiveness of the use of funds.

It is also possible to optimize the fund allocation mechanism, reasonably determine the fund allocation standards according to the ecological environment and development needs of each region, ensure the fair and reasonable allocation of resources, and focus on supporting areas with fragile ecological environment and concentrated characteristic problems, so as to improve the effectiveness of ecological transfer payments.

The implementation of the above measures will help to further clarify the use and effect of local ecological transfer payment funds, and promote the coordinated development of ecological environmental protection and economic development. Therefore, it is suggested that the government should strengthen the supervision and evaluation of the use of funds while increasing the intensity of local ecological transfer payment, and formulate more scientific and reasonable policy measures to ensure that local ecological transfer payment can better play the role of environmental protection.

6. Conclusion

Local ecological transfer payments have played an important role in the environmental protection of 68 key ecological function areas in Anhui Province, and promoted the improvement of ecological environment quality and ecological benefits. The following conclusions can be drawn from the study of the environmental protection effect of local ecological transfer payments:

Local ecological transfer payments can increase the investment and protection of the ecological environment, and promote the improvement and protection of the ecological environment. The first is to increase investment in ecological environment restoration and restoration, such as wetland restoration, ecological water system management, vegetation restoration, etc., which will help improve the stability and ecological function of the ecosystem. The second is to strengthen environmental monitoring and data statistics, regularly monitor and evaluate the ecological environment, discover environmental problems in a timely manner and take corresponding protective measures. The third is to create an ecological compensation mechanism, to compensate for the damage to the ecological environment, to encourage enterprises and individuals to take the initiative to assume environmental responsibilities, and to reduce the negative impact on the ecological environment. Fourth, in order to promote the construction of ecological civilization and green development, enterprises and local governments will be guided to increase investment in the protection of the ecological environment through local ecological transfer payments, promote the transformation and upgrading of industrial structure, and promote the development of green economy.

Local ecological transfer payments can motivate local governments and enterprises to pay more attention to environmental protection and improve environmental awareness and responsibility. At the same time, it can also promote the adjustment and optimization of the industrial structure, promote the development of environmental protection industry and the transformation of green economy, and improve the ecological environment of local residents, and improve the quality of life and happiness of residents.

Acknowledgments

This work is supported by 2023 Anhui University of Finance and Economics Undergraduate Research and Innovation Fund Project (Grant No: XSKY23043ZD).

References

- [1] Liu Yong, Zhao Lijuan. Evaluation of local ecological transfer payment policy in China--taking a province as an example [J]. China Environmental Management, 2018, 6 (06):117-121.
- [2] Jiang Shuyan, Li Liqing. Study on Local Ecological Transfer Payment Policy [J]. Ecological Economics, 2019 (03):75-79.
- [3] Chen Jie, Lin Lin. Study on the Efficiency of Local Ecological Transfer Payment [J]. Rural Economy, 2018 (09):57-62.