

Discussion on the Construction of Ecological Civilization and Sustainable Development of Regional Economies

Xinci Tian

Texas A&M University College Station, 77840, the U.S.

Abstract: The construction of ecological civilization has a complementary relationship with the sustainable development of economies. With a view to achieve better coordination and promotion, and fully demonstrate the role of the construction of ecological civilization in sustainable development of economies within the range of regions, the relationship between them shall be exactly analyzed, and the measures of the construction of ecological civilization shall be well explored in accordance with the requirements of economic development. To this end, this paper researches the relationship between the construction of ecological civilization and the sustainable development of regional economies and puts forward several suggestions and measures so as to provide assistance for playing the role of the construction of ecological civilization and pushing forward the sustainable progress of regional economies.

Keywords: Construction of ecological civilization; Regional economies; Sustainable development

DOI: 10.12346/ems.v3i1.4147

Author Introduction: Xinci Tian (February 1995), Anshan Liaoning, female, M Ec , majoring in Economics.

1. Introduction

In the environment of the new era, we shall focus on pushing forward sustainable development of regional economies based on the construction of ecological civilization, establish a sound ecological and environmental compensation system, enhance the ecological and environmental protection within the range of regions, form correct senses and complete all-round prevention & control during the construction of regional economies, improve utilization efficiency of resources and energy, promote sustainable development of environment using ecological protection methods and maintenance methods, and play a role of pushing forward regional economic progress.

2. Analysis on the Relationship between the Construction of Ecological Civilization and the Sustainable Development of Regional Economies

The ecological and environmental problem has been an important issue for sustainable progress of economies during economic development in all regions in China. The environmental pollution will impose a certain threat on sustainable development of regional economies. If the protection of ecology and environment fails to be assured within the range of regions, severe pollutions and damag-

es will occur, which will damage the development carriers of regional economies and fail to satisfy the sustainable requirements of economic progress. By enhancing the construction of ecological civilization in regions, we can improve the utilization efficiency of land resources, water resources and other resources using system modes and management measures, effectively protect the local ecology and environment, improve the current situation and development status of ecology, provide good environment and carriers for economic development, prevent the constraints of industry and enterprise development resulted from environment damages through environmental protection and maintenance, and enable the sustainable progress of economies within the range of regions. Therefore, the construction of ecological civilization has a direct relationship with sustainable development of economies, which shall draw an attention^[1].

3. Measures to Promote Sustainable Development of Regional Economies by the Construction of Ecological Civilization

3.1 Improvement of Regional Ecological Compensation Mode

At present, constrained by the economic system, the western developed countries take market-oriented modes

for ecological compensation while the developing countries usually use government-core measures for ecological compensation; in particular, the practices and measures for ecological & environmental compensation is single in China and most of the work are implemented by governments. For example, governments have organized shelter forest construction, returned the grain plots to forestry and returned the cultivated land to pastures. Though good performance has been achieved, due to large national territory, complex ecological & environmental conditions in all regions, a large number of ecological & environmental gaps to be compensated and single financing mode, the conflicts in compensation is rather obvious. Therefore, China shall actively learn from the success experience of other countries during ecological & environmental compensation, introduce market mechanism, and establish government-led and market-assisted ecological compensation mode.

1) The government-led ecological compensation measures mainly including longitudinal financial transfer payment and transverse financial transfer payment are taken to complete the compensation projects. Wherein, the longitudinal compensation measures are to provide sufficient funds sourcing finance, tax and collection and with the role to assure the sufficiency of ecological compensation funds from senior departments to junior departments; in addition, policies are utilized to provide corresponding guidance for economic development in each region, constant ecological & environmental restoration and protection are constantly conducted under the role of governments, and even ecological & environmental protection is provided to local masses so that the local masses can form correct senses in environmental protection. However, such a compensation mode has certain defects during application and cannot form a direct environmental relation with regions, making it difficult for governments to form an accurate understanding on concrete status of all regions and improve the ecological compensation effect. The transverse compensation measures are to provide fund support from local governments within a range of regions using transfer payment; such measures impose a certain dependence on the work of local governments and enable to assure a direct relationship between the construction of regional ecological civilization and the local governments and certain ecological compensation role under direct guidance of local governments^[2].

2) The ecological compensation work assisted by market mechanism highlights the leading role of the market so that the compensation subjects can develop

toward diversification, make up for the deficiencies of the government-led work and broaden the source channels as well as space of funds. During actual operation, it is necessary to establish the compensation mechanism of supply and demand in combination with the supply-demand relationship change within the range of market, interconnect the compensated subjects and the compensation subjects and formulate sound work systems & contents. During the construction of ecological civilization and the compensation of ecology ^ environment within a region, the participation of market enables people to directly learn about the value of resources within resource utilization period, fully understand the significance of environmental protection and form an accurate concept.

It can be seen that the traditional single ecological compensation mode of governments cannot meet the requirements of current era development. We shall take the compensation by governments as the main part and the compensation by markets as the auxiliary part in combination with the characteristics of sustainable development of regional economies and the features of the construction of ecological civilization, jointly establish a sound ecological compensation system, improve the environmental protection efficiency, fully implement the construction of ecological civilization in the regions, and elaborate the role and value in promoting sustainable development and progress of regional economies^[3].

3.2 Integration of Environmental Protection Concept and Economic Construction

In the construction of ecological civilization of China, we have begun to focus on and divide the regions of China, formed prior development regions, key development regions, restricted development regions and prohibited development regions, and put forward the positions as well as standards within all regions. Thereof, the prior development regions and key development regions are certainly advantageous in science and technology; in such regions, we shall attach importance to the manufacturing of materials and products during regional economic development, invest sufficient S&T power, and improve the level of regional economies under the action of modern science and technology. The restricted development regions and the prohibited development regions have rich ecological and environmental resources; during regional economy progress, we shall strengthen the development of ecological products, focus on the protection and governance of natural environment, and enhance the ecological and environmental restoration effect after resource utilization. From the perspective of sustainable progress

of regional economies and the industrial development of ecology & environment, a country shall bear the duties of environmental protection, clarify and analyze the relationship between environmental protection and economic development, establish a sound environmental protection mechanism in prior development regions and key development regions, fully implement the polluters' governance responsibilities and payment concepts in the whole process of economic construction, assure the implementation of the environmental protection concept in each link, enable the subjects of regional economy construction to form a correct concept in ecological & environmental protection and restoration, make contributions to ecological and environmental protection during production, prevent resource waste as well as environmental pollution, and push forward sustainable development of economies^[4].

3.3 Improvement of Pollution Prevention and Control Mode

With a view to promote sustainable development of regional economies, we shall strengthen the pollution prevention and control, and take the prevention as the main part and the control as the auxiliary part. Firstly, we shall greatly implement pollutant emission reduction system within the regions, accurately evaluate the impact on ecology and environment before the construction of a new project, urge the transformation and treatment of non-conforming pollutants and allow the construction of a new project only after compliance with standards. In addition, we shall focus on the chemical production enterprises and steel production enterprises with high energy consumption and severe pollution, urge the introduction of modern pollution prevention & control techniques and mechanical devices, minimize the quantities of emitted pollutants, and prevent the damages of production work on environment. The subjects with severe pollution such as chemical enterprises and steel enterprises shall take modern air pollution prevention and control techniques, water pollution prevention and control techniques and soil pollution prevention and control techniques, prevent adjacent water and environment from pollution, and assure compliance of water of rivers and lakes with standards in case of damage to life quality as well as health of adjacent residents. Secondly, we shall focus on monitoring regional air pollution during pollution prevention and control, use modern desulfurization and denitrification techniques during production by local enterprises, and only emit the conforming gas to the atmospheric environment. During this period, we shall focus on soil pollution prevention and control of cultivated land, immediately control the

heavy metal pollution or other pollution issues, restore soil quality and remove the threat to quality and safety of agricultural products. Finally, we shall focus on environmental protection within regions, constantly improve the ecological and environmental quality, greatly protect local wetland, cultivated land and other ecological resources, enhance the self-restoration performance of ecology, actively learn from advanced afforestation and lake-making experience, and maintain the diversity of local biological species. If any endangered wild animal exists, a sound protection scheme shall be formulated to enable animals to reproduce stably^[5].

3.4 Establishment of Green Economic Development Mode

In the construction of regional ecological civilization, we shall focus on establishing green economy development mode, greatly advocate energy-saving and emission-reduction, improve the development effect and utilization level of various resources, and prevent environmental pollution or energy waste. Firstly, we shall enhance the utilization of various resources and energy, take modern energy-saving techniques for the enterprises with high energy consumption, minimize the energy consumption from production, suggest governments to make tax-preference policies and financial support policies for the enterprises eliminating backward production equipment & techniques and introducing modern energy-saving and emission-reduction techniques, and improve the enthusiasm of energy transformation of enterprises. Secondly, we shall optimize and improve the energy structure layout within the regions, actively build wind power generation system, solar power generation system and nuclear power development infrastructure, improve local energy structure, replace traditional non-renewable energy with new energy, and achieve the purpose of environmental protection. Finally, we shall formulate a sound plan for the development and utilization of natural resources, implement the management system in water resources and land resources within regions, strictly control the consumption of water, improve the utilization efficiency of water resources by water circulation systems as well as techniques, and optimize the allocation of water resources within regions; in addition, we shall strengthen development monitor in accordance with characteristics and conditions of local land resources, complete S&T innovation, and assure sustainable development of economy and environment by improving the utilization efficiency of resources^[6].

4. Conclusions

To be concluded, a certain correlation exists be-

tween the construction of ecological civilization and the sustainable development of regional economies. Any severe ecological pollution or environmental damage will severely restrain the local indirect progress. Therefore, in the new era, we shall establish green economy development model with “promoting sustainable development of regional economies” as the goal, consummate environmental pollution control mechanism, integrate environmental protection concept and regional economy construction, improve ecological compensation system, and promote sustainable progress of regional economies using the construction of ecological civilization.

References

- [1] Liu Pengfei. Discussion on the Construction of Ecological Civilization and the Sustainable Development of Regional Economies [J]. *Economic Research Guide*, 2019, 5 (23): 40-41.
- [2] Han Yi, Zhao Wenwu, Zheng Bofu. Promoting the Construction of Ecological Civilization and the Sustainable Development of Regions—2020 Academic Forum Review on Ecological Civilization and Sustainable Development in China [J]. *Acta Ecologica Sinica*, 2021, 41(3):1259-1265.
- [3] Li Huaxiang, Lu Shan. Discussion on The Construction of Ecological Civilization and The Sustainable Development of Regional Economies[J]. *Journal of Liaoning Teachers College (Social Sciences Edition)*, 2017, 3(5):5-6, 47.
- [4] Yuan Jiachun. Research on Regional Economic Development Based on Ecological Civilization Construction[J]. *Chinese Commerce*, 2018, 23 (14): 146-147.
- [5] Huang Wengang, Chen Na. Research on Regional Sustainable Development and Ecological Civilization Construction [J]. *Journal of Green Science and Technology*, 2017, 6 (12): 305-306.
- [6] Bao Rui. Demonstration and Future of Ecological Civilization Construction in Shenzhen: the Construction of the Demonstration Area Guided by Xi Jinping’s Ecological Civilization Thought [J]. *Social Sciences Journal of Harbin Institute of Technology (Social Science Edition)*, 2021, 23 (1): 137-144.