

Research on the Strategies of Sustainable Development in Chinese Ethnic Regions

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Abstract

Sustainable development is the harmonic coexistence of humans & nature, balanced development, sustainable prosperity. The nature ideology of integral harmony of the Chinese minority nations, and their ideology of equality of admiring life and the ideology of production of simple circulation are identical to the central ideology of sustainable development; This paper presents a three-dimension model of regional sustainable development, the model includes the harmonious development of economy, society, resources and environment. This paper discusses culture advantages of sustainable development in Chinese ethnic regions, and the important work is to explore the sustainable development strategies for Chinese ethnic areas and provides guidance for achieving sustainable development, such as the development of the eco-ethics of the minorities, and educating the sense of eco-citizen, perfection of the policies and regulations to protect the ecological environment of the ethnic regions, and promoting construction of industrial ecosystem and clean production of "cell engineering" as well as developing the no-carbon or low-carbon industry in Chinese ethnic regions.

Keywords: Sustainable development, Ecological ethics, Ecological industry, Circular economy

1. Introduction

Since 1960s, global environment pollution and ecology destruction have been more and more serious following the industrialization and growth of the world economy. The conflict between industrial undertakings and the world environment is more severe than before. People have begun to rethink and review traditional values and development concepts, realizing that the traditional economic development model will only aggravate the predatory exploitation of resources and seriously damage the environment. The sustainable development strategy cannot follow the traditional model with large input, high consumption and serious pollution; it must turn into small input, low consumption and light pollution.

The ethnic areas in China (five auto-autonomy regions and three provinces Yunnan, Guizhou and Qinghai with more minority populations) are the boundary's green shield of China mainland, the treasure house of multi-ecological status with rich ecological ethics and culture. The regions have advantages of natural resources, the advantage of eco-culture and autonomy of the ethnic regions. Due to the historical, geological and social reasons, the ecological environment issue is especially remarkable, which becomes the key factor to restrain the development of the ethnic regions. The four major ecological fragile belts of our country

(severe cold, deserts, infertile yellow soil and Karst) are the main distribution in the areas of minorities. In the process of industrialization, the ecological environment of minority areas tends to deteriorate severely with series of severe ecological crises, such as the over-use and destruction of the forests and wetlands, the deterioration of woodland, the lost of water and soil, drought and water shortage, flooding, desertification, extinction of native plant and animal species etc. Certain places fall into the malignant cycle of "poverty-destruction-poverty", which not only affects the existence and development of the people in the minority areas, but also generate environmental refugees and collision between races, affects the stability of the minority areas and the safety of the boundaries, which may also turns in to corresponding social risks.

Sustainable development and ecological civilization require human activity and the natural environment to be in harmony. To achieve this purpose, it is necessary to establish a scientific outlook on development, coordination of nature, green consumption, and ecological sustainable development to ensure sustainable economic development in Chinese ethnic regions. Developing industries from ecological point of view is to promote economic development and resource efficient utilization. Therefore, while considering the economic development and benefits, close attention should be given to the social and ecological environment, such as supporting ecology restoring projects, cultivating green industries, developing ethnic minority culture industries, which is no-carbon or low-carbon industry, promoting construction of industrial ecosystem and clean production of "cell engineering" etc.

2. Three-Dimension Model Of Regional Sustainable Development

Sustainable development is to meet the needs and aspirations of the present without compromising the ability to meet those of the future. That is to say, while we achieve the goal of economic development, natural resources such as atmosphere, fresh water, ocean, land and forest that mankind depends on for existence should be protected for descendants to develop, live and work in peace and contentment forever. In general, sustainable development depends on economic development, social progress, resource and environment. Therefore, we present a three-dimension model of regional sustainable development (as shown in figure 1).

2.1 Dimension Of Economic Development

Economic development is the foundation of regional sustainable development, which continually provides the safeguard for social development, government management and the improvement of resources utilization ratio in order to improve people's material, cultural and living standards constantly. The basic problem of "economic sustainable development" is how to solve the derived contradictions between development and distribution of resources with economic development and growth.

2.2 Dimension Of Social Progressive

Social development aims to promote people's living quality, improve social civilization, offer enough job opportunities, safe and comfortable environment, good traffic transport capacity and health support, and make all citizens have equal opportunities to improve their quality of life.

2.3 Dimension Of Resources & Environment

Resources, here refer to natural resources, mainly including land resources, water resources, forest as a source of human's means of production and means of livelihood and the material foundation of social civilization development. With the constant development of human society, the lack of resources, population explosion and environment deterioration, are the three basic obstacles for economic development. The quality of the eco-environment is the important factor resources, mineral resources, wild animals and plants resources, etc. Natural resources are to evaluate sustainable development and reflect the coordination intensity of society, economy, resources and environment. Therefore, judging whether the environment system of a city can keep sustainable development, should not only evaluate the environment system but also the relations between economic development and environment bearing capacity.

3. Culture Advantages Of Sustainable Development In Chinese Ethnic Regions

During the long-term process of interacting with nature, ethnic minorities established their unique way of survival & cultural ethics, formed their unique national customs and eco-ethics of protecting environment and wild animals. These culture and eco-ethics advantages help realize social, economic and ecological sustainable development in Chinese minority regions.

3.1 The Nature View Of Overall Harmony

To treat nature with respect is the kind of harmonic model of handling the relationship between man and nature by ethnic minorities. It takes man & nature as an inseparable entirety, maintains that nature is the basis of human life and eternal destiny, and that human & nature must rely on each other, coexist in prosperity and develop in coordination. For example, people who are in belief of Shamanism in north China believe that humans should treat nature and all creatures with respect, live in harmony with all kinds of different organisms. This ecological idea no doubt regulates the behavior of ethnic minorities & promotes environmental protection of nature and ecological harmony.

3.2 The View Of Renewable Production

Since it's very hard to choose their ecological environment, ethnic minorities have to conduct production activities under realistic natural conditions, and their views on everyday living are

evolved to adapt distinctively to the unique geographical environment. The existence of these concepts plays an important guidance role in waste reduction, green consumption, less impact on nature and wild animal protection. It also maintains local ecological balance, coordinates the harmonic fusion between man & nature, and promotes practical natural way of living which restores nature to its original condition. For example, the nomadic way of constant migration for animal husbandry, and the nomadic way of rotation of grassland and pasture to reduce pressure on human activity, to ensure that pastures and water sources inexhaustible, not only to promote the benign cycle of grassland ecosystems, but also the protection of sustainable development of animal husbandry; Hani, Dai, Dong etc. rice-growing and other ethnic groups in south China developed the concept of forest ecosystems, which provides sufficient water and a friendly ecological environment for rice production under the *forest-water-farm* land model.

3.3 The View Of Equality From Revering Life

Due to the limitation of productivity level, ethnic minorities usually deify nature & natural creatures. Worship for heaven & earth is the most important content of worship of nature. Tibetans' ancient ideas believe that all species are from the same origin and lives are correlated; Uygurs view their existence as sustained by the Eternal Blue Sky, Tengri, the fertile Mother-Earth Spirit Eje, and a ruler who is regarded as the Holy Spirit of the Sky. Heaven, earth, the spirits of nature and the ancestors provide every need and protect all humans; Dai and Bulang in Xishuangbanna of Yunnan province both have the fine tradition of worship and protection of the "Dragon Mountain"; The Yi minority deify the trees around the village, while the Qiang and Bulang treat the forest as a god; The Dai believe that the elephants and the peacocks are auspicious things, people will not allow any harm to them; The Shamanism from North Shamanism regard bears, wolves, eagles etc. as their gods. All of these contribute to the protection of the ecological resources of mankind in an important way. Especially in animal protection, ethnic minorities have developed the ethical awareness of wild life conservation.

The history and social development of ethnic minorities is in fact the history of the relationship between ethnic minorities and the natural environment. Ethnic minorities bound by their culture, norms, have constantly adjusted their behavior and the relationship between man and nature, protected the natural ecological environment, maintained national cohesion, and promoted harmonic sustainable development in the regions of ethnic minorities.

4. Strategies Of Sustainable Development In Chinese Ethnic Regions

The basic contradiction of the eco-economic system is that of a growth-oriented economic system of unlimited demand for natural resources between ecosystems with limited stable supply of natural resources. On the one hand, the development demand of human activities on ecosystems are increasing; on the other hand, the supply of the overloaded ecosystem continues to decline, especially for the more vulnerable ethnic minorities' ecological areas, where economic development, social progress and ecological civilization face various pressures and challenges. In order to comprehensively building a harmonious society, ethnic minority

areas should promote the construction of ecological civilization from multiple aspects and realize sustainable development.

4.1 Inherit And Promote Eco-Ethics From Ethnic Regions

The rational factor in China's traditional eco-ethics in minorities is an intuitive and simple sentimental concept, without a comprehensive exposition on the relationship between man and nature. The integration of ecological ethics of minorities and the modern ethics is a rational choice for the reservation of ecology and the harmonious development in ethnic regions. The shared prosperity and a harmonious society of ecological civilization have to be ultimately achieved based upon the ecological ethics from minorities through the absorption of the theory of modern science to fit their specific situations. With the development of society, ethnic minorities have been unable to adapt to ecological ethics in pursuit of a modern society for the purpose of maximizing the economic benefits of large-scale material production activities. Therefore, the inheritance of traditional eco-ethics from minorities must be uplifted so that it is built on the basis of modern science.

The eco-ethics of ethnic people do well on cultivating "sense of eco-citizens". The development of "sense of eco-citizens" is responsible for the "civic responsibility" in solving ecological problems in a fundamental way. Though fully understanding the rational factors in decision-making behavior of individual citizens and through legal, administrative, economic and other incentive-based measures, supplemented by a means of enforcement, combined with eco-ethics from ethnic minorities, an established code of conduct conscious citizens is the most effective, ever-lasting and prevention-over-restoration approach for ecological conservation and sustainable development.

4.2 Improve Related Policies And Regulations Related To Protect The Ecology Of The Ethnic Regions

Basically the Mongolian grassland kept its primitive natural status until the middle 18th century. As early as the dynasty of Genghis Khan, the destruction of ecological environment is listed as national prohibition, e.g. The hunting of immature animals are prohibited, trees were not allowed to be cut indiscriminately. "Those, who destroy the farming-land, will be punished ... the whole family will be executed if one forgot to extinguish fire and burn the grass land" was also a law at that time. The system of ecology compensation funds should be improved in the minority areas, which makes the ecological compensation vertically from the government more specific and reasonable. Especially the minority areas may fully take advantage of the "the law of autonomy of the ethnic regions" and the advantage of privilege of setting new laws of the government (especially the privilege of making changes accordingly). The national laws and regulations may be detailed, specific regulations may be added for execution to increase the operability and vigorously protect the construction of ecological civilization and the continuous development of economy and society. For example, in 2008, more than 1 million Yuan was provided through the regional & county level finance of Ali to compensate the losses of the local people by wild animals. This is another example of "pay the bill" by government since the

adoption of "Tibet Autonomous Region, Provisional Measures for Property Loss & Personal Injuries by Prominent Land Wildlife" in 2006.

4.3 Promote Construction Of Industrial Ecosystem And Clean Production Of "Cell Engineering"

Through the simulation of natural ecosystems and the establishment of organic circular industrial development model, industrial ecology aims to solve the problems in industrial economic development, environmental protection, and sustainable uses of resources. We can make full use of resources, reduce wastes, use recycled materials, eliminate environmental damages, and improve the scale and quality of economic development, achieve sustainable economic development and harmony between man and the nature. Thus, industrial ecology is a new industrial development model, to be sure to achieve sustainable development, we should try hard to promote construction of industrial ecosystem in Chinese minority areas.

The enterprise is the micro but main one who carries the implementation of industrial ecology and the cycle-based enterprises are the ecosystem cells. To transfer a traditional system into an ecosystem, we must start from every enterprise's own ecology. We can start from those core enterprises, actively promote clean production of cell engineering, and push the qualified enterprises to establish ISO14001 environmental management system.

4.4 Developing The Unique Economy In Circular Model

The unique industry of the minority areas has broad commercial potential, e.g. The tobacco of Yunnan, the Gouqi of Ningxia, the oxen wool of Tibet, the raw paint in the west of Yunnan etc. Especially with the popularity of modern tourism to pursue uniqueness, knowledge and difference, the unique minority tourism has become the main industry in the regions of Yunnan, Tibet and Qinghai. The minority areas should combine local national characteristics – national situation, regional advantages– regional situation, market need – commercial situation, to choose developing characteristic industry, explore how to use advanced techniques and skills to convert the potential advantages to real economical advantages and to realize the jump of the economy, choose the characteristic industry and those which may be able to co-existent, explore the model of unique circular economy development. The activities of human beings should be constrained within the limits of the natural ecological system, i.e. the economical construction and the ecological civilization should develop in harmony, obey the inner rule of the composite system of "society-ecology-economy".

4.5 Developing "No-Carbon Industry" Or "Low-Carbon Industry" In Ethnic Regions

China's borderline stretches 22 thousand kilometers long, of which 19 thousand rests in ethnically autonomous regions. China shares borders with 14 countries and has more than 30 ethnic minority groups, which are adjacent to the same ethnic groups across the border, sharing similar language and culture. With favorable location and ethnic advantage, ethnic regions have potential of developing export-oriented economy and low-carbon or non-carbon industries based on frontier trade. By developing these industries, it can not only improve their economic strength, but also realize sustainable development.

Cultural industry of ethnic minorities has wide market prospect by providing consumers with ethnic, exotic and primitive spiritual cultural product and art service. Dynamic Yunnan is a large-scale dance drama, dynamically incorporating traditional beauty and modern flavors with a reintegration of the most original and rustic dance elements of Yunnan. A 70-percent cast of performers are the ethnic people from all villages of Yunnan province. Authentic costumes and props which are taken from real life, unsophisticated singing and primitive, enthusiastic dancing, which fuses traditional dance and modern dance, recreates fairy ethnic flavor of Yunnan from reality. It is appraised by the experts as “resurrection of ethnic dance” with significant economic and social benefit.

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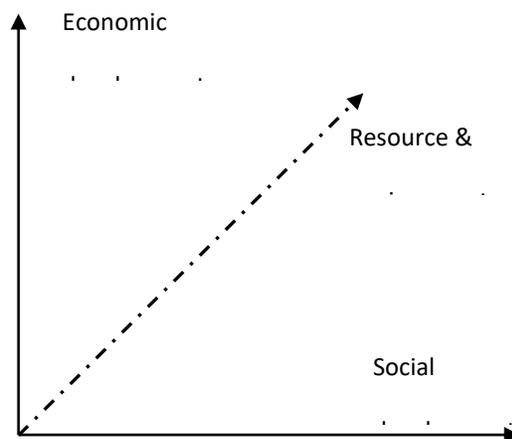


Figure1. Three-dimension model of regional sustainable development

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