

Study on the Protection and Sustainable Utilization of Plateau Ecology

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Abstract: With the expansion of human activities, the fragile ecological environment in the plateau area has been destroyed by human beings. Therefore, the ecological protection and sustainable utilization of the plateau have become the top priority. In view of this, this paper mainly summarizes the existing problems of plateau ecological environment. The necessity of ecological protection and sustainable utilization of the plateau is also discussed. This paper puts forward a new strategy for the protection and sustainable utilization of Plateau ecology. So that the Plateau ecosystem can be restored as soon as possible, and the people living in the plateau area can live a rich life.

1. Research background

1.1 Literature review

Zhang Yangjian and others believe that under the background of globalization, the ecological environment of the plateau is becoming more and more serious. This restricts the sustainable development of agriculture and animal husbandry in plateau. In order to protect the plateau ecological barrier, countries actively provide technical support for the restoration and management of plateau grassland and the development of agriculture and animal husbandry. A series of new methods for protecting plateau ecology have been studied, and good results have been achieved (Yang et al, 2018). Yin Xiaoi and others believe that plateau, as an ecological type of nature, especially plateau lakes and freshwater resources, has become an important position for the sustainable utilization and development of biodiversity and human survival. The analysis of environmental damage in plateau has become a key research at home and abroad. They put forward countermeasures for sustainable protection of plateau environment in order to make sustainable use of plateau ecology (Yin et al, 2018). Xiao Jin and others believe that environmental problems have become a crisis facing the public. On the one hand, the reason is the unreasonable social distribution system. On the other hand, it is due to the traditional mode of human development. Moreover, this mode of production has great damage to the environment, especially to the plateau ecological environment. Therefore, more attention has been paid to the protection and sustainable utilization of the plateau ecological environment (Xiao et al, 2017). Qi Changwei and others believe that in recent years, as the representative of the plateau area of Tibet, the agricultural ecological environment has been deteriorating, which has had a serious impact on your economy. This paper makes a comprehensive analysis from the aspects of soil and water destruction, geological disasters, biological disasters and vegetation degradation. They pointed out the phenomena of ecological environment pollution in Plateau area, and proposed comprehensive treatment from increasing vegetation cover and playground construction (Qi et al, 2017). Feng Shu and others believe that due to soil erosion and unreasonable land use, the Plateau vegetation degradation is serious and the ecological environment is fragile. In view of the ecological environment problems in the plateau area, these scholars put forward the principle of landscape ecology and carried out a lot of research. A new model of ecological environment management in plateau was developed (Feng et al, 2017).

1.2 Purpose of research

As the main land form on the earth, Plateau plays an important role in environmental regulation, animal and plant protection and human survival. Since modern times, with the continuous development of human society and economy, the land utilization rate of the plateau has further increased, and the ecological damage of the plateau has been serious. Protecting plateau ecology and sustainable utilization are imminent (Wang, 2017). In this paper, starting from the necessity of protecting the plateau environment, let people realize the importance of plateau environment for human survival. And let more people participate in the protection of the plateau environment. Use more high-tech to continuously develop new strategies of environmental protection in the plateau, control the deterioration of plateau environment in the shortest time, and make life more comfortable in the plateau.

2. Necessity of Ecological Protection and Sustainable Utilization in Plateau

2.1 Benefiting economic growth in plateau area

Because of its unique resource advantages, the plateau region has long led to the economic development of the region. It also makes a great supplement to the economy of other places in the same country or region. But the plateau area is limited by geographical conditions. The exploitation cost and transportation cost of resources in this area are relatively high. In this way, mining difficulties and low utilization rate are easy to occur. If the economic development of a country or region is mainly supported by resources. This not only has a serious impact on the consumption and waste of resources. At the same time, it has caused serious damage to the ecological environment of the region. This hinders the sustainable development of the economy in the region. Therefore, to protect the ecological environment of a region's plateau is the prerequisite for achieving sustainable economic development (Wang, 2017).

2.2 Favorable for people in plateau areas to get rid of poverty and become rich

The average altitude of plateau areas is generally over 4000 meters. The climate in this area is relatively cold, natural disasters often occur, leading to the deterioration of the ecological environment. So the production efficiency of the people in this area is relatively low. For example, China's Sanjiangyuan Reserve administers 16 counties in one city. According to the survey, there are 590,000 people living here, of whom 410,000 are engaged in animal husbandry, reaching 70% of the total population. Seven counties in this region belong to the key poverty-stricken counties of the state, especially the poor people engaged in animal husbandry account for more than 75%. The more impoverished people are, the more intensive grazing will be, which will lead to further deterioration of the plateau's ecological environment and make the farmers and herdsmen here even poorer. Therefore, we should strengthen the coordination of the relationship between resources and population, environment and development in the plateau area. Only in this way can people in the region be lifted out of poverty (Huang, 2017).

2.3 Benefiting global ecological security

The plateau is irreplaceable for a country's ecological security and strategic position. It can be said that it is the most critical ecological protection area in a country. It is also the commanding heights of a country's ecological security. Research shows that the subsequent radiation flow generated by the heat island effect in the plateau region can affect the climate and environment in other parts of the world. Therefore, the maintenance and balance of the complex ecosystem in the plateau area is of far-reaching significance to a country, even to the whole world. Only by strengthening the ecological protection of the willing regions in the world, can the global ecological security be more conducive.

2.4 The heritage protection of the plateau

Plateau area is a landscape area with regional and cultural characteristics in the world. There are not only ice and snow, vast and magnificent grasslands, dense rivers and rivers, endless primitive forests, scattered alpine lakes, tens of thousands of wild animals and plants, beautiful natural scenery. The ecosystem of the plateau area has evolved over millions of years. It has unparalleled ecological landscape, historical and cultural landscape, as well as important scientific research value. If human beings destroy the huge historical heritage formed over millions of years in just a few hundred years, the loss will be incalculable. Therefore, the ecological environment of Baohua Plateau is to protect human natural heritage, historical heritage and human landscape heritage.

3. Existing problems of plateau ecological environment

Firstly, desertification, salinization and calcification have appeared in the plateau land, and become more and more serious. According to the data of the international authoritative organization's investigation on Desertification in 1996. The desertification area of the global plateau has reached 36 million square kilometers, accounting for about 25% of the global land, which is equivalent to the total land area of Russia, China, Canada and the United States. Moreover, global desertification is increasing at the rate of 50,000-70,000 square kilometers per year, which has seriously affected more than 100 countries and regions in the world. Among them, the most prominent problem is land desertification in Plateau area. Secondly, the forest area in the plateau area has decreased sharply. According to statistics, 12 million hectares of forest disappear every year in the world. Because of less rainfall and fragile ecological environment, the annual forest coverage in the plateau area is also decreasing. The reduction of forest resources is a serious hazard to human beings. It can aggravate soil erosion, cause soil erosion, increase river sediment, raise river bed and increase flood and flood (Zhang, 2017).

Thirdly, the extensive production mode in the plateau led to the reduction of grassland area. For example, China's Sanjiangyuan Ecological Reserve covers a total area of 395,000 square kilometers. However, the number of livestock has reached 12.74 million sheep units, and there is an overload level. According to the data survey, the grassland coverage in the reserve accounts for 98% of the total area. However, grassland degradation is serious, reaching 5.63 million hectares, accounting for about 15% of the grassland area. Finally, the number of wild animals and plants in the plateau decreased. Some rare animals and plants are even in danger. The continuous deterioration of the ecological environment in the plateau area has seriously threatened the living conditions of biological species, reduced the distribution area and reduced the diversity of animals and plants (Bao et al, 2017).

4. Strategies for ecological protection and sustainable utilization of Plateau

4.1 Establishment of plateau ecological protection area

For plateau areas, if the overall landscape is destroyed, then the significance of local protection is relatively small. The idea of safeguarding national security and sustainable development should be taken into consideration. Ecological protection zones should be established in plateau areas around the world. The prevention of pollution and ecological protection in plateau areas should be emphasized in accordance with the two aspects of ecological construction and ecological protection. This is of great significance to the long-term development and all-round protection of the plateau area. It is necessary to integrate resources continuously and take overall protection, long-term protection and vigorous protection as the basic points of ecological protection in the plateau area so as to restore the plateau ecological environment.

4.2 Establishment of plateau ecological protection foundation

In order to ensure the environmental problems in the plateau area, the "plateau ecological protection foundation" should be established. Funds are mainly raised from four aspects. First, the

environmental protection construction funds of the countries where the plateau areas are located. The second is the compensation fund of the countries around the plateau. For example, India, Nepal, Myanmar and other countries around the Qinghai-Tibet Plateau provide necessary funds for the ecological protection of the Qinghai-Tibet region. Thirdly, ecological donation for plateau ecological protection should be carried out, and social funds should be used for environmental protection. Fourth, issuing plateau ecological lottery tickets and raising idle funds. Establishing the Plateau Ecological Protection Foundation can also attract talents and funds from all over the world, and turn the plateau ecological protection into a wide-ranging international behavior.

4.3 Developing ecotourism depending on local characteristics

In the global land area, many plateau areas are multi-ethnic areas. They have their own unique culture and religious beliefs, and their social and cultural resources are quite rich. Among them, the grassland area has a unique charm. Therefore, relying on these cultural characteristics of the plateau and combining with the local environment, the development of ecological tourism has obvious advantages. In recent years, with the rapid development of tourism, the ability of ecotourism in plateau area to receive tourists has increased year by year, and the economic income has also increased. According to the forecast and analysis of authoritative organizations, more than ten million people travel to plateau areas around the world every year, while the potential number of tourists is more than 100 million. As long as the tourism facilities in the plateau area are improved and vigorous propaganda is made. These demands will bring good economic benefits to the plateau area.

4.4 Improving the infrastructure construction on the plateau to make farmers and herdsmen above poverty and get rich

The problem of food and clothing in many plateau areas has not been solved, and sustainable development is impossible under such circumstances. Only by linking the protection of plateau ecological environment with the eradication of local poverty can farmers and herdsmen get rid of poverty thoroughly and become rich. Specific measures can be carried out in three points. Firstly, a series of projects such as returning farmland to forestry and pasture to grassland in the plateau area will be implemented and a permanent and reasonable compensation mechanism will be introduced. Then new water conservancy projects will be built to speed up Grassland Ecological Management and expand grassland planting area. Finally, we should increase the construction of irrigation and water facilities and provide subsidy for poor farmers and herdsmen in ecological protection areas.

4.5 Encouraging the public to take an active part in environmental protection

Each country should strengthen the protection of the plateau ecological environment according to its own conditions. All mankind can clearly understand the current plateau ecological environment is facing difficulties, as well as potential crises. In order to enhance the awareness of the whole mankind to protect the ecological environment of the plateau, and enhance the sense of responsibility for the protection of grassland forest resources. Let people consciously participate in the action of restoring the plateau ecological environment. Countries should further promote the process of democratization and formulate relevant policies for the protection of plateau ecological environment so that the public can truly participate in them.

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