

## Probe into Cultural Ecology Protection of Forests in China

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**Abstract:** Cultural ecology protection has been a hot topic in the urban construction planning, and refers to the protection of the architectural layout and architectural style. It means a comprehensive protection of “the beautiful order” of the urban civilization environment. Forests have economic, ecological, social, and cultural functions. In recent years in China, great progress has been made in forest ecological protection, but less progress in forest cultural ecology protection. The authors believe that since China has phased out into the consumer economy, forest cultural ecology protection will be playing a leading role in the future forestry development in China. With higher level of urbanization attained, the urban forest together with the cultural ecology protection will be more eye-catching. It is suggested that forest cultural ecology protection should be incorporated into forest legislation and management, and should be emphasized in forestry development planning, highlighted in the integration of physical wealth and spiritual wealth, so as to promote the forest cultural ecology protection and green cultural development in China.

The following items are highlighted in this article:

- The concept of forest cultural ecology
- The important role that forest cultural ecology plays
- Urban forest cultural ecology preservation
- The legislation and planning for forest cultural ecology

**Key words:** forest cultural ecology; socio-economic development; urbanization; ecological protection; China

**JEL codes:** Q57, Q58

### 1. Introduction

Culture preservation has become a popular issue in recent years. It mainly refers to the planning and protection of the civilized urban environment of the city or the so-called “built environment”. A city will be spiritually incomplete and lack the internal value if its cultural ecology (including its history, humanities, arts, and science, etc.) is not preserved well, even if it may have a good ecological environment and order.

In recent years, the utilization and protection of forests’ economic and ecological functions has been advanced substantially, while those of the social and cultural functions have been ignored. Forest ecology protection is the foundation of forestry development, whereas the forest socio-cultural preservation, i.e., the forest

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cultural ecology, is the crux and soul of future forestry (Helvetas Swiss Intercooperation Nepal, 2011).

In the last nearly forty years, China has achieved remarkably rapid economic development and industrialization, but negative impacts, like income inequality, environmental degradation and spiritual pauperization have also appeared (FAO, 2010; FAO, 2012). China has become the second largest economy in the world and great improvement has been made in people's living standards and cultural life. Forests play an important role in the improvement of people's cultural life, particularly their spiritual life, and will still continue to play an important role; therefore, the cultural ecology protection becomes an important research subject.

## **2. Necessity of the Forest Cultural Ecology Preservation**

### **2.1 The Current Situation of China's Forest Ecology Preservation**

Forest ecology preservation, as an important part of the global environment protection, is paid close attention to by every society in the world. Especially, with the popularity of the concept of sustainable development and the important role played by the forest in carrying out the emission reduction goal of the Kyoto Protocol, forestry is bestowed with ever more positive recognition. While the traditional model of forest management is being replaced by the more sustainable ones, forest ecology preservation has been enhanced to an unprecedented level and are becoming one of the central strategic issues of national developments in many countries.

China has made great progress in forest ecology preservation (Cao S., 2010). First, key natural forest protection projects have been implemented and illegal deforestation has been prohibited. Till the end of year 2010, the natural forest area under practical protection has reached 0.101 billion hectares nation-wide, accounting for 84.17% of the overall coverage of natural forests. Second, the shelter forest system has been built up. Since 1950s, China has set up "three-north shelterbelt", coastal and Yangzi River shelterbelt subsequently, which has gradually improved the ecology status. Third, the project of "Conversion of Cropland to Forest" has been implemented, as a result of which, 20.7902 million hectares of new forest have been created, accounting for 2.83% of the total area of the project (State Forestry Administration, P. R. China, 2010). National compensation has also been arranged for the project of "Conversion of Cropland to Forest", to ensure the resumption and reconstruction of the forests institutionally. Fourth, the project of "Barren Mountain and Wasteland Afforestation and Overall Resumption of Vegetation Coverage" has been carried out. The government will provide seedlings for growers and adopted the policy "those who plant the forests will owns and benefit from the forests". Felling is subject to the constraints of national law and regulations. Fifth, methane pits are constructed in the countryside to generated energy, so less wood is consumed. However, the current forest ecology preservation in China cannot fully get adapted to the demands of socio-economic and sustainable development.

### **2.2 Existing Problems in Forest Ecology Preservation**

First, in contrast with the ever enlarging scale of forest ecology preservation, the cultural and social functions of forests are not stressed accordingly. Many people simply equalize forest ecology preservation to afforestation, setting up nature reserve zone or forest park, and/or developing forestry tourism (State Statistical Bureau, P. R. China, 2010), leaving its socio-cultural functions largely disembodied. Some local governments only pay their attention to simple afforestation, tourism and economic benefits, ignoring spiritual, educational, cultural or entertaining activities. And the tree diversity is poor in afforestation, ecology tourism is also under-developed. Some local governments have actually spoiled the original natural scenery by putting in too much artificial scenery in nature reserve zones to solely enlarge tourism.

Secondly, forestry legislation, which regards forests as resource economy, has not yet emphasized from a holistic perspective that forest is an integral part of the whole ecological system. China's Forestry Law is intended to protect the environment and provide forest products to meet the demands of economic development and people's livelihood, which, while dispensing with the resource economy mentality, is insufficient for reiterating forest resource development from the higher standpoint of ecological system protection. As a result, current Forestry Law somehow ignores or weakens the social and cultural functions of forest resources, though it stresses the economic function of forest resources.

Thirdly, the instability of forest ownership is an important reason for the deficiency in forest ecology protection. Forest cultural ecology protection is still staying away from the agenda. Though it is explicitly specified in China's Forestry Law that "stabilizing the ownership of forest management, forest wood, and forest land" is a fundamental principle, the establishment of P. R. China indicates that the instability of forest ownership is the major reason for the severe detriment of China's forest and the poor condition of ecology preservation. In spite of the substantial development of forest industry and a certain degree of ecology recovery owing to 35 years of reform and opening-up, forest cultural ecology protection has not yet been brought to the agenda and China has still not walked out of the mode of enforced resumption and protection.

Fourthly, the shortcomings in forest management are hampering ecological system protection and forest cultural ecology development. The backward management of China's forest resources and the insufficient investment is restricting the sustainable development of the forest resource. It is already held worldwide that the preservation of forest resource needs the policy support and capital provision from the government to improve ecological environment. The long term planned economy in China has still its influence in management of forest resource, including the separation of the owner and the user of national forest, the heavy forest taxation, and the lack of funding for forest construction. Although felling quota has been implemented to restrict felling activities in recent years, the overall insufficient investment has affected the ecological system preservation and forest cultural ecology development.

### **2.3 Forest Cultural Ecology Preservation is the Crux and Soul for Future Forestry Development**

With GDP per capita reaching 4000 dollars, China's social and cultural development has come to a stage of consumption, where people's main pursuit is the life quality. According to Marslow's Demands Hierarchy, after the lower physiological, security and emotion demands are satisfied, people ascend to higher demands such as respect and self-realization (Zhang C. & Luo J., 2007). Marslow and some other behavior psychologists hold that the demands level that most of the people of a country are at in the hierarchy is in direct correlation with the development level of that country's economy, science and culture as well as people's education level. In under-developed countries, physiological and safety demands predominate, and the more advanced demands are restricted only to a minority of people. The contrary is true in the developed nations. Despite the big gap between the rich and the poor, with the increase in GDP per capita year by year, the pursuit for the quality of life and environment is becoming the theme of China's socioeconomic development. The improvement on the quality of life and environment needs the support of desirable cultural ecology and the healthy ecological system. In consequence, from now on, we need to protect and develop forest cultural ecology, to make early planning and arrangement, in order to make forests meet the higher demands beyond resource economy. Consequently, in the future forest development, economic development is the core, forest ecology protection is the foundation, and forest cultural ecology is the crux and soul according to the demand of forestry.

### **3. Urban Forest Cultural Ecology Preservation as the Crux**

Forest industry has passed over the stage to satisfy the demands for wood and forest products, multi-functional utilization of forest resources and forest ecology system management, and is taking forest cultural ecology preservation and development as the new direction for advancement. Following urbanization, urban forest becomes the crux for cultural ecology protection. According to the statistics, China's urbanization rate has reached 46.59%, still leaving a huge gap from the average 70% urbanization rate in world's developed countries (Zhang Y., 2010). In accordance with the implicatures of cultural ecology preservation, alongside the protection and construction of historic culture, architecture culture and neighborhood culture, green culture and city view should also be emphasized.

Urban forest is an important part of urban infrastructure. Urban forest has the following roles to play in the urban cultural ecology preservation and development: first, bearing rich historic, cultural and social messages, it has a significant impact on people's personality, quality and characteristics, or even the traits and spirituality of a nation. An old Chinese saying goes, "It takes ten years to grow trees but a hundred years to rear people." Most cities with deep rooted culture always possess ancient woods and famous trees, which are witnesses of transitions and historic events; To protect them is the duties and responsibilities of city planners. Second, architectures are stone history books, which directly reflect the features of a city. Urban forest is the carrier of spirituality, liable to exhibit culture and upgrade function for the city. Urban forest is the lifeline of a city, closely related to the life of the dwellers. Third, urban forest is the carrier and proponent of green culture. Green color is an important constituent of a city's landscape and is also the major carrier of urban public arts. Many cities impress the tourists with their characteristic native breeds of trees and flowers. Green culture is an advanced culture, indicating the values of a city's material wealth production and the direction of a city's spiritual advancement, aiming to bring about the harmony between man and nature, people and people, as well as people and themselves. Construction of city landscape can push the city with incessant momentum only when it carries green culture throughout. In the construction of city parks and public green lands, besides distributing sculptures, artifacts, road markers and trash bins that bear the city's humanity messages into the green, the cultivation of local breeds of tree is also important for keeping the culture. In the meantime, urban construction should reserve green land, waters, and wetland, balancing the relationship between construction and environmental protection, creating good city ecology and cultural ecology. With the speeding up of urbanization in China, the preservation of forest cultural ecology should play the central role, since it keeps the city life, exhibits the city's history and culture, develops green culture, and also supports the intrinsic spirit of the city.

### **4. Forest Cultural Ecology Protection Should be Included in Forest Legislation and Management**

It has become a universal consensus to protect the ecological environment, reduce public hazard, and prevent pollution. However, ecological environment protection is not equal to cultural ecology protection. Therefore, it is necessary to first acknowledge the importance of cultural ecology protection and then legislate. Forestry Law can be based on ecology or cultural ecology, as well as on resource economy. The protection and construction of forest cultural ecology should begin with revising Forestry Law and solve the problems of setting the forest ecology and cultural ecology protection as the standard.

In management, planning should be stressed to profile the organic integration of material and spiritual wealth, pursuing the harmony between man and nature, people and people, as well as people and themselves. At present, in the preservation and development of cultural ecology, the functions of local breeds of trees and flowers have been overlooked in many cities. The city planners transplanted southern breeds to the north or grown large areas of expensive imported lawn turfs. All these represent violations of the rules of cultural ecology preservation. American architect Sharin once observed, “A city is an open book, from which you can see its aspirations. Let me see your city, then I can tell what the inhabitants there are pursuing culturally” (Zhang C. & Luo J., 2007). On the other hand, forests lacking cultural ecology protection and management are fragile forests without internal supporting spirits, grounding and soul, indicating an incomplete understanding of the management of forest ecological system.

Finally, strengthen the management of forest resources and promote the development of green culture. The overall management of forest resources does not only include expanding the area, but also include increasing the variety and quality. To solve the problem of supply and demand of wood and to meet the requirements of national economic development for forest products, it is necessary to improve forests’ age structure, breed structure, productivity and utilization rate. Currently, many scholars are studying “ecology culture”, “ecology civilization”, and “green culture”, etc.; these are another important part of forest resource management and forest ecology preservation. Whatever the title, the core here is the integrated of forest physical production and spiritual production. This is the direction and momentum of forest resource production and management. In consequence, reinforcing forest resource management and propelling forest cultural ecology protection as well as green cultural development are the direction of future forest resource management and the major content of perfecting forest ecological system regulation.

## 5. Discussion

Forests have economic, ecological, social, and cultural functions. Forest cultural ecology is the natural living systems formed on the basis of a comprehensive human spirit in forests. In recent years, the utilization and protection of forests’ economic and ecological functions has advanced substantially, while the social and cultural functions are less developed in China. Forest ecology preservation is considered by every society in the world as an important part of global environmental protection. More recently, the importance of forestry has increased with the popularity of the concept of sustainable development and the important role played by the forest in carrying out the emission reduction goal of the Kyoto Protocol. Sustainable development also includes cultural sustainability and cultural sustainable development. In this context, we propose the forest cultural ecology protection to promote sustainable development of cultural environment. We also hope that this proposal can be applied to other countries and regions, and it may become a subject—the forest cultural ecology protection.

In November, 2012, China set the goals and strategies for future development at its 18th National Congress. Its two overarching objectives are to complete the building of a moderately prosperous society in all respects by 2020, and to build China into a modern country that is prosperous, democratic, culturally advanced, and harmonious by 2050 (Rolf Berthold, 2012). This timetable tells us: Chinese growth shifts gear from speed to quality. A prosperous society will mean sustainable growth, expanded democracy, significantly improved cultural soft power, overall improvements in living standards, and an environmentally friendly society that conserves resources. Forest cultural ecology is a part of the forest culture, is also the part of cultural soft power. Forest

cultural ecology preservation helps us achieve the two overarching objectives better through a harmony, a democratic and a scientific approach. And it will play a more effective role in promoting China towards prosperity and modernization.

## 6. Conclusions

In the future, ecology protection will be the foundation of forestry development, and the cultural ecology preservation is the crux and soul of it. The socioeconomic development of China has entered the stage consumer economy, where people are pursuing the quality of life. This specific juncture requires forest cultural ecology to play a significant role; especially, urban forest in the process of urbanization will play a great role in people's rich urban culture life. Consequently, how to better preserve forest cultural ecology by means of legislation, planning and regulation is an important project in front of us.

China has made substantial advancement in the management of the forest resource and ecology. Forest cultural ecology protection and regulation related to "ecological culture" and "green culture" contribute a great deal to the improvement of residents' life quality as well as happiness index. Forest ecology concept should be extended in order to better protect and manage forest cultural ecology and promote the development of cultural life in China.

The concept of forest cultural ecology is an important extension of forest ecological concept in this paper. We hope that our arguments are positive in order to better improve related research.

## Acknowledgements

This research is funded by the forestry public welfare scientific research project of the State Forestry Administration (200904003) and the scientific research project of Ministry of Education, P. R. China (09YJA910001). We thank them for their strong support.

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