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Legislation Characteristics and Implementation Recommendations for Ecological and Environmental Protection Regulations on Qinling Mountains in Shaanxi Province

Long RAN^{*}

College of Marxism, Northwest A&F University, Yangling 712100, China

Abstract This paper analyzed status and significance of Ecological and Environmental Protection Regulations on Qinling Mountains in Shaanxi Province in structure of Shaanxi local environmental laws. Theses Regulations have two outstanding characteristics: firstly, integrated protection and development, accurately regulating and guiding relation coordination; secondly, attaching great importance to using economic means to protect ecological environment and provide basis for administration according to law. It came up with specific methods for speeding up formulation of Regulations, making effort to explore implementation cases for development of Guanzhong economic zone and Qinling Mountains ecological protection, establishing methods and systems for ecological and environmental protection follow-up monitoring and evaluation of Qinling Mountains, and raising these Regulations to national laws of Ecological and Environmental Protection for Qinling Mountains.

Key words Protection of Qinling Mountains, Ecological environment, Policies and laws

1 Introduction

Ecological and Environmental Protection Regulations on Qinling Mountains in Shaanxi Province (hereinafter referred to as these Regulations) have been approved by the 34th Session of Standing Committee of the 10th National People's Congress of Shaanxi Province on November 24, 2007, and were implemented officially as of March 1, 2008. For more than 8 years, within the legal framework of these Regulations, cities and counties in Qinling Mountains stick to the principle of overall planning, protection first, scientific use, and strict management, fully implement building ecological cities and counties, and circular development in regional economic development, ecological and environmental protection, and industrial park construction, and national ecological demonstration area, and beautiful townships. Significant achievements have been made in these projects. Besides, the World Wildlife Fund (WWF) Qinling Mountains Natural Heritage investigation, Qinling Mountains National Geopark application, Qinling Mountains World Natural Heritage application are vigorously undertaking, which promote improvement of protection and reputation of Qinling Mountains^[1].

2 Qinling region is multi-crossing areas of local environmental laws of Shaanxi Province

According to major points of local environmental legislation, firstly, it is required to formulate implementation methods for related environmental laws already issued by National People's Congress, such as *Environmental Protection Law*, *Law of Environmental Impact Assessment*, *Regulations of the People's Republic of China on*

Nature Reserves, etc. Secondly, it is required to formulate special (single) local laws in provincial, regional, and river basin areas, to solve outstanding environmental problems and protect important ecological functional zones.

From the perspective of scope of application of local environmental laws and regulations, Regulations on Prevention and Treatment of Water Pollution in Weihe River Basin in Shaanxi Province covers the north slope of Qinling Mountains, while Regulations on Prevention and Treatment of Water Pollution in Han and Dan River Basin in Shaanxi Province covers the south slope of Qinling Mountains. Most nature reserve areas of Shaanxi Province, such as habitat and survival wetland of four national treasures, crested ibis (Nipponia nippon), panda, Golden Monkey (Rhinopithecus roxellanae), and antelope, and essential drinking water sources of five cities in central Shaanxi Province and southern Shaanxi Province are concentrated in Qinling Mountains. Therefore, Qinling Mountains area has become an important area for Shaanxi Province implementing national Nature Reserve Protection Regulations, Environmental Protection Regulations on Urban Drinking Water Source Protection Zone in Shaanxi Province, and Wetland Protection Regulations of Shaanxi Province. In addition to announcement and implementation of Ecological and Environmental Protection Regulations on Qinling Mountains in Shaanxi Province, Qinling Mountains become an area overlapping with many local environmental protection laws and regulations of Shaanxi Province.

Therefore, compared with other special (single) laws and regulations, *Ecological and Environmental Protection Regulations on Qinling Mountains in Shaanxi Province* are more pertinent, have wide protection scope, higher protection objectives, and higher legal correlation, higher centralization of environment and development issues, stronger radiation functions, and also become more important. They have the overall significance and can main-

tain the basic level. We can imagine, if Qinling Mountains lose the water preservation function, for south slope, how to guarantee Danjiangkou Reservoir resources in central line of South-to-North Water Diversion Project? For north slope, how to prevent and control pollution of Weihe River if the problem of only 1 having flow in Hua County of main streams of Weihe River in June 2007 occurs again? Therefore, it is required to make overall planning and coordinated arrangement for water source conservation, reasonable allocation of water resources, water supply safety, and water pollution prevention and control.

Table 1 Currant situation of local environmental legislation in Shaanxi Province

Type	Laws and regulations
Implementation methods	Methods for implementing Environmental Protection Laws of People's Republic of China in Shaanxi Province
	Methods for implementing Regulations of the People's Republic of China on Nature Reserves in Shaanxi Province
	Methods for implementing Laws of People's Republic of China on Environmental Impact Assessment in Shaanxi Province
Regulations	Regulations on Prevention and Treatment of Water Pollution in Weihe River Basin in Shaanxi Province
	Environmental Protection Regulations on Development of Coal, Oil, and Gas in Shaanxi Province
	Environmental Protection Regulations on Urban Drinking Water Source Protection Zone in Shaanxi Province
	Wetland Protection Regulations of Shaanxi Province
	Regulations on Prevention and Treatment of Water Pollution in Han and Dan River Basin in Shaanxi Province
	Eco-environmental Protection Regulations of Shaanxi Province
	Ecological and Environmental Protection Regulations on Qinling Mountains in Shaanxi Province

The importance of Ecological and Environmental Protection Regulations on Qinling Mountains in Shaanxi Province is also consistent with demarcation line of north and south climate of China, watershed of Yellow River and Changjiang River, and important ecological functions of Oinling Mountains in regulating climate, keeping water and soil, conserving water sources, and maintaining biological diversity. As enhanced by former President Hu Jintao in investigation in Shaanxi Province in January 2010, Qinling Mountains are important ecological barrier for south and north and it is required to do a good job in ecological protection of Qinling Mountains, improve water conservation ability, keep biological diversity, and invigorate this precious resource treasure. In this situation, it can be deemed that Ecological and Environmental Protection Regulations on Qinling Mountains in Shaanxi Province have a good start and will play a great role in protection of national important ecological functional zones.

3 Legislation characteristics of Ecological and Environmental Protection Regulations on Qinling Mountains in Shaanxi Province

3.1 Sticking to the principle of laying equal stress on ecological protection and development of Qinling Mountains Protection of ecological environment of Qinling Mountains concerns the overall situation. It not only concerns safety guarantee for water supply of North China and central Shaanxi Province, but also concerns national and local species on the brink of extinction. It provides livable habitat for such rare and precious species, and develops clean and renewable resources to make more contribution to global carbon reduction. However, we should not ignore and belittle the anti-poverty issue of more than 5 million people in Qinling Mountains. About 74% areas of Qinling Mountains are national and provincial poor counties, people's cultural quality is relatively low. According to survey and statistics, only 3. 28% people older than 6 years old have college or above education in 38

counties, and there are less than 20 people having senior middle school education in 10000 people. Therefore, it is required to lay equal stress on protection and development, stick to safeguarding ecological functions and improving rights and interests, and people's livelihood, and enhance ecological protection and overall development of Qinling Mountains, so as to realize harmony between nature and mankind and realize sustainable development. Simply stressing ecological protection is difficult to operate and implement. On the principle of sticking to protection, it is required to conduct development in scientific manner, create opportunities for improving rights and interests and people's livelihood, and employment environment, accumulate more financial resources, and provide more fund support for protection, so as to realize benign development and benign cycle of ecological protection of Qinling Mountains^[1-2].

Ecological and Environmental Protection Regulations on Oinling Mountains in Shaanxi Province specify that it is required to stick to the principle of overall planning, protection first, scientific use, and strict management. The regulations abandon the original protection that focuses on protection, and run through the main line of "overall planning, protection, use, and strict management", conforming to characteristics and actual situation of regional economy, society and environment of Qinling Mountains. In line with the above principles, Ecological and Environmental Protection Regulations on Qinling Mountains in Shaanxi Province integrate environment and development. Firstly, it divides middle high mountain areas of Qinling Mountains with altitude above 2600 m as forbidden development area, middle mountain areas of Qinling Mountains with altitude 1500 m to 2600 m as limited development areas, and low mountain areas of Qinling Mountains with altitude lower than 1500 m as moderate development areas. Secondly, at the same of establishing objectives of vegetation protection, water resource protection, and biological diversity protection, it is required to focus on formulating various laws and regulations on development and construction, mineral resource development. traffic facility construction, urban and rural construction, and tourist facility construction, which is the limit to development and construction of these fields, and also the support of high start and high standard of Qinling Mountains regional development. For example, Article 58 specifies that towns in Qinling Mountains should gradually establish and improve public facilities such as sewage treatment, domestic rubbish harmless treatment, water supply and drainage facilities, popularize marsh gas in rural areas of Qinling Mountains, villages with relatively concentrated people should strengthen ecological and environmental protection and public sanitation management, and make overall planning and construction of domestic rubbish, and sewage drainage and collection facilities. All of these are protecting ecological functions of Qinling mountains and favorable for creating new livable ecological and environmental order of Oinling mountains^[3-5].

3.2 Attaching great importance to protecting ecological environment by economic means^[5-6] Protecting ecological environment by economic means is a weak point in local environmental legislation. As important water source area of central line of South-to-North Water Diversion Project and central Shaanxi Province Project of "Water Diversion from Han River to Wei River",

biological diversity enrichment area of crossing north and south and connecting east and west, important ecological safety barrier of north and south, and ecological vulnerable areas, Qinling Mountains are of utmost importance to provincial and even the national ecological protection. However, due to relatively poor and backward economic development of Qinling Mountains, it seems very important and urgent to protect ecological environment by economic means including various financial channels, and simply legal prohibition can not solve the problem of ecological environment of Qinling Mountains. Therefore, Ecological and Environmental Protection Regulations on Qinling Mountains in Shaanxi Province had attached great importance to economic means, which is a great breakthrough and innovation.

Economic means stated in *Ecological and Environmental Protection Regulations on Qinling Mountains in Shaanxi Province* include appraisal incentive mechanism, incorporation into financial budget, establishment of special funds, compensation mechanism, formulation of preferential policies, allocation of special funds, and withdrawal of environmental control deposit, payment of comprehensive integrated control compensation fees, most of these provide basis for administration in compliance with laws^[7-8].

Table 2 Articles involving economic means in Ecological and Environmental Protection Regulations on Qinling Mountains in Shaanxi Province

Articles	Contents
Article 7	People's government above the county level in Qinling Mountains should include ecological and environmental protection of Qinling Mountains into working target responsibility system which will be assessed by superior People's government for rewards and punishment.
Article 9	The provincial people's government and city, county (district) people's government in Qinling Mountains should include ecological and environmental protection funds of Qinling Mountains into financial budget. The provincial people's government and city people's government in Qinling Mountains should establish special funds for
Article 10	infrastructure construction of Qinling Mountains, support Qinling Mountains to develop various industries beneficial to ecological environment and improve production and living conditions of local residents. Provincial people's government should establish and improve ecological environment compensation mechanism in accordance with relevant laws and regulations, and make economic compensation for Qinling Mountains ecological and environmental protection areas.
Article 22	Local people's government should formulate and implement preferential policies and measures for natural forest protection.
Paragraph 2 of Article 26	Provincial people's government should allocate funds for aerial seeding afforestation of Qinling Mountains.
Paragraph 2 of Article 47 Article 48	Entities engaged in mineral resource development in Qinling Mountains should withdraw environmental control guarantee fund for implementation of ecological and environmental control. When carrying out mineral resource development in Qinling Mountains and implementing comprehensive control compen-
	sation system for ecology and environment, development entities should pay the compensation funds for comprehensive control of ecology and environment, as well as water system damage, water resource loss, water body pollution, vegetation damage, water and soil loss, ecological degradation, and land destruction.

3.3 Policy recommendations for implementation (i) The promulgation of *Ecological and Environmental Protection Regulations on Qinling Mountains in Shaanxi Province* is an influential measure for Qinling Mountains establishing special protection funds and ecological and environmental compensation mechanism. At present, it is more urgent to make efforts to create conditions for implementation of *Ecological and Environmental Protection Regulations on Qinling Mountains in Shaanxi* Province. Provincial

government and relevant departments should accelerate formulation of various economic means and implementation methods, combine legal management and economic means in an organic manner, to make significant achievement in protection of ecology and environment and development of Qinling Mountains. We recommend that the provincial people's congress annually implement one time of monitoring for implementation and performance effect of economic means $^{\lceil 9-10\rceil}$.

- (ii) Most of 15 districts and counties of Xi'an City, Baoji City, Weinan City, and Shangluo City in Guanzhong - Tianshui Economic Zone are situated in area of Oinling Mountains, southern Shaanxi directly radiated by Guanzhong - Tianshui Economic Zone has 25 counties and districts in area of Qinling Mountains. In accordance with policies and measures in Development Plan for Guanzhong - Tianshui Economic Zone approved by the State Council, it is required to make efforts to explore application approaches and methods for ecological protection of Qinling Mountains from financial and tax policies, land policies, environmental protection policies, and urban and rural integration policies. It can be considered that the area of Oinling Mountains is difficult and weak point of development of Guanzhong Economic Zone and area directly radiated by Guanzhong Economic Zone. If not treated properly, it may hinder the development, thus it is recommended that relevant departments energetically support Guanzhong Economic Zone to develop cases suitable for Ecological and Environmental Protection Regulations on Qinling Mountains in Shaanxi Province, to realize synchronous growth of development of Guanzhong Economic Zone and ecological protection of Qinling Mountains[11-12].
- (iii) Qinling Mountains provide a natural boundary between North and South China and an essential watershed of Yellow River and Changjiang River. According to great significance and ecological value of ecological and environmental protection in Qinling Mountains, as well as great significance in the world, it is recommended that the National People's Congress should lift *Ecological and Environmental Protection Regulations on Qinling Mountains in Shaanxi Province* to the national level, *i. e. Ecological and Environmental Protection Law on Qinling Mountains*, to cover Gansu, Shaanxi, and Henan provinces [13–15].
- (iv) There is no tracing and monitoring and evaluation of ecological environment in Qinling Mountains in Ecological and Environmental Protection Regulations on Qinling Mountains in Shaanxi Province. This is a defect in legislation of ecological and environmental protection. In view of long-term, complex, arduous, and slow ecological and environmental protection, it is recommended to establish ecological and environmental protection tracing and evaluation method and system for Qinling Mountains. Besides, it is recommended to protect biological diversity in accordance with water conservation ability, develop and build green, clean, and sustainable monitoring means and system according to changes in carbon sink of vegetation, and scientifically monitor and evaluate improvement of ecology and environment of Qinling Mountains, to

promote implementation of the Twelfth Five-Year ecological and environmental protection objectives [16-17].

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