Development Strategies for a National Central Park in the Qinba Mountains in China

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Abstract: Rich in natural ecology and historical and cultural resources, the Qinba Mountains region is one of the China’s most concentrated areas of national preserves, forest parks, and geological parks. This paper focuses its discussion on the necessity and feasibility of establishing a national central park in the Qinba Mountains, and it proposes ideas and suggestions for establishing such a park in the region. The study is based on an analysis of issues and challenges associated with the value of Qinba Mountains’ resources, their protection and utilization, and lessons learned from other countries’ experiences with national parks. The study’s objectives are to enhance the international influence of the Qinba Mountains region and mediate the conflict between resource protection and the alleviation of poverty.

Keywords: Qinba Mountains; national park; strategic research; poverty alleviation

1 Introduction

Situated in the central region of China, the Qinba Mountains form China’s north-south demarcation zone in terms of geography, climate, and culture. In world geography, the Qinba Mountains, together with the Alps and the Rocky Mountains, are referred to by geologists and biologists as “the Earth’s three sisters.” The Qinba Mountains’ special geographic and environmental conditions gave birth to rich and unique natural, historical, and human resources, and they created the world’s major species gene pool and origin point of oriental civilization. The region also is one of the most concentrated areas of national nature reserves, national scenic spots, national forests, geological parks, water conservancy zones, and wetland parks. However, unlike the Alps and the Rockies, the Qinba Mountains are far from possessing the international fame that they deserve. Moreover, the nature reserves are mostly concentrated in relatively poor and underdeveloped regions where there is a significant contradiction between the goals of resource protection and poverty alleviation. Because the national forest, geology, water conservancy zones, wetlands, and other parks overlap in this region, and the overlapped areas are under the control of numerous governmental departments, contradictory management is the prominent consequence of involvement by different jurisdictions. This paper focuses on how we can learn from foreign development experiences to fully implement the Qinba national central park strategy. The strategy involves streamlining management systems and mechanisms, mediating between resource protection and poverty alleviation, expanding and consolidating the region’s natural and human resources, and creating cultural tourism products that have a global appeal to improve the brand perception of the Qinba Mountains.

2 Current value, use, and protection of the Qinba Mountains’ resources

2.1 High resource value with low brand perception

The Qinba Mountains stretch more than 1 000 km from east to west, total 308 634 km², and involve 20 cities divided into
districts from five provinces (Shaanxi, Hubei, Sichuan, Henan, and Gansu) and one city (Chongqing), Gannan Tibetan Autonomous Prefecture, Shennongjia Forestry District, and 119 counties (district, county-level city) [1]. The region is an important water supply zone for water conservation and water diversion projects, and it is the source of numerous rivers, including the Wei River, Han River, Jialing River, Dan River (Danjiang), and Luo River. This area is one of the most diverse of the ecological functional zones for 17 important species as designated by National Planning of Main Functional Areas [2]. The number of major plant and animal species exceeds 6,000, accounts for 75% of the nation’s total species, and includes four national treasures—giant panda, golden monkey, takin, and crested ibis—as well as forest musk deer, Chinese yew, Faber’s fir, and other rare plants. The Qinba Mountains region is not only an important ecological function zone; it is also the world’s major species gene pool of world-class ecological value.

The Qinba Mountains region is the birthplace of Chinese civilization as well as the origin of humankind, evidenced by numerous relics and sites of Chinese ancestors in this region. The evidence includes the Chongqing Wushan fossil of a non-hominin ape that inhabited the region 2.04 million years ago and Huaxu, Fu-hsi, Nvwa, Shennong, Dadiwan, and Banpo sites of Chinese ancestors. Many scholars refer to the Qinba Mountains region as “Father Mountain,” with “Mother River” indicating the Yellow River. The profound Confucian classic, I Ching, refers to the Qinba Mountains as “China’s dragon vein.” Although the Qinba Mountains are regarded as one of the world’s three most important mountain ranges and have universal value regarding geological formations, flora and fauna, and cultural heritage, and they are prominent in oriental culture, they are not well known internationally. Compared to the global reputations of the Alps and the Rockies, the Qinba Mountains do not have a strong international appeal, and people’s recognition of them is generally weak. This lack of knowledge of their value and significance to China and to the world sharply contrasts with the reality of their outstanding status.

2.2 Eco-highland: developing lowlands near the mountains

The Qinba Mountains region has 40 national-level nature reserves, mostly concentrated in relatively poor and underdeveloped areas, and the distributions of nature reserves and poverty-stricken areas significantly overlap. By 2015, the average urbanization rate of county-level cities in the Qinba Mountains region was 32.9%, with 67 national-level poverty-stricken counties accounting for 11.3% of all poverty-stricken counties in China. The poor population of this region accounts for 10% of China’s total population in poverty, and it is typical of concentrated contiguous poverty-stricken areas to mountainous areas in China [1]. It is believed that poverty in this area exists because most of the residents living near the nature reserves use underdeveloped agricultural techniques that heavily rely on the natural resources despite the region’s high ecological value. “Live near the mountain and get food from the mountain” is the residents’ method of subsistence. However, since the establishment of nature reserves imposes transportation barriers, the residents are cut off from the natural resources when establishment occurs on land they were using for hunting and gathering, and the relationship between ecological conservation and poverty alleviation becomes important. Moreover, the regional division of various types of national forest parks, geological parks, water conservancy zones, and other parks overlap each other, resulting in conflicting management practices. Along with the lack of a strong brand perception and clear profit model, this problem has led to an insignificant role for resource development in the regional economic development planning process. The Qinba Mountains region with high ecological value is in a vicious cycle where “increased protection increases poverty,” and “higher poverty increases protection.”

2.3 Integral region with divided management

Management of nature reserves, forest parks, and national landscape and famous sceneries in the Qinba Mountains region is distributed among dozens of governmental departments, including forestry, agriculture, water conservancy, land resources, construction, and tourism. The overlap of authority results in problems of protection, administration, enforcement, evaluation, and other resource-related concerns. Regulations conflict, zoning is unclear, and coordination lacks clear mechanisms. For example, the Qinba Mountains’ main peak, Mount Taibai, is simultaneously a national forest park and a national water conservancy scenic spot as well as a national nature reserve; it even has an ancient town preserved as a historical-cultural site. Numerous departments provide various types of ecological protection, means for utilization, and management perspectives, which, inevitably, lead to conflicts of administrative interest, inefficient management, and other problems. Many areas have become “treasure lands,” over which numerous departments compete, or “abandoned areas” because of the varying extents of transformation of economic value.

Along with the problems of overlapping administration, there are problems of lack of coordination among the provinces and cities of the Qinba Mountains region. Although the region is an integral one, the distribution of resources does not fully coincide with the administrative divisions. The region covers many provinces and cities with different ideas about the protection of ecological resources, extents of use, and management. Economic interests often cause overexploitation and re-exploitation. However, the periphery of the Qinba Mountains comprises more than 20 large and medium-sized cities, such as Xi’an, Chongqing, Chengdu, Wuhan, Zhengzhou, and Lanzhou. These large and medium-sized cities regard the Qinba Mountains as their “back garden” and continue to send tourists there, but relations
between the tourist destinations inside and outside the tourist service center are not yet coordinated. Thus, a shortage of internal tourism service facilities greatly influences the sustainable development of Qinba Mountains’ tourism.

3 Introducing the concept of a “national central park”

The United States was the first country to propose the concept of a “national park,” and it established the world’s first national park (Yellowstone National Park) in 1872. Yellowstone National Park was created by the United States decreeing that “the National Park Service system is established to protect the landscape, natural and historical sites, and wildlife and provide entertainment for tourists [3].” Studies have found that the national-park theory and practice of the United States have three main features: (1) coordination of conservation and use, (2) a mature and complete legal foundation, and (3) an intensive and united administrative system. These features are discussed below.

3.1 Coordinated conservation and use as the main purpose

From studying the course of developments related to the United States’ national park system, we find that the concept evolved from American artist George Catlin’s “great concern over influence of the US West Development on Indian civilization, wildlife and wilderness” into an “area of public places and amusing activities providing for people’s welfare and happiness” when Yellowstone National Park was established. Later, the terms “world heritage,” “biosphere reserve,” and so on came into play. Thus, the original national park model has transformed from a simple, pure protection concept into an ecological resource and heritage conservation model that concerns protection and recreation functions. The conservation method also changed from passive protection to a more positive and sustainable direction [4].

3.2 Mature and complete legal system as the basis of management

Legislation promulgated by United States’ administrations has been associated with the entire process of national park development. The Bill on the Allocation of Land near the Upper Range of the Yellowstone National Park River to Public Park Special Land, enacted in March 1872, established the world’s first national park, Yellowstone National Park. The Bill on the Establishment of the National Park Service Act and Related Purposes (also known as National Park Service Organic Act or Organic Act), enacted in August 1916, created the National Parks Service (NPS) [5]. In the later period of the national parks’ conceptual evolution, the United States formulated many laws and regulations covering all aspects of the parks, varying from protection to organizational management to special regions, and it built an organic system. These acts laid a foundation for the strict protection, development, use, and management of national parks (Table 1).

3.3 Implementation of an intensive and united administrative system

The United States mainly adopted a centralized model supplemented by local and civic institutional cooperation. The national park system was under vertical leadership and unitarily managed by the National Park Service of the US Department of the Interior. The source of funding for protection was mainly from financial allocations of the federal government, supported by ticket sales, franchise income, and social forces. Over the years, the US National Park Service developed a “public benefit idea” and implemented the management system through multiparty participation and balanced powers, responsibilities, and interests [4]. This vertical and unified management mechanism ensured the greatest extent of efficient management and avoided various problems, such as overlapping jurisdictions.

Table 1. The United States national park legislative system [5].

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<th>Horizontal legislation</th>
<th>Nature and environment series</th>
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<td>Systematic core legislation</td>
<td>National Environmental Policy Act; Federal Cave Resources Protection Act; Land and Water Conservation Fund Act; Surface Mining Control and Reclamation Act; Endangered Species Act; Comprehensive Environmental Response, Compensation, and Liability Act; Clean Air Act; Federal Insecticide, Fungicide, and Rodenticide Act; Oil Pollution Act; Federal Water Pollution Control Act; Coastal Zone Management Act; Geothermal Steam Act; Mineral Leasing Act</td>
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<td>Systematic management legislation</td>
<td>Organic Act, National Park System General Authorization Act</td>
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<td>Regional legislation</td>
<td>Alaska National Interest Lands Conservation Act, California Wilderness Act</td>
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The main types of natural and cultural heritage protection and management in China are nature reserves, scenic spots, and various types of parks; the earliest-built national landscape and famous sceneries were designed using the template of a national-park concept. This paper concerns the Qinba Mountains’ unique ecological, historical, and cultural resource values, the strategic position of the national central main ecological function zones, avoidance of further deterioration of the Qinba Mountains’ ecological protection and utilization, and the problems of overlapping management, inefficiency, and duplication of regional exploitation. The project “Study on the Green & Circular Development Strategy of the Qinba Mountains” suggests a “national central park” strategy that learns from other countries’ experiences, and it explores effective national park establishment models and management mechanisms. The strategy fully integrates the Qinba Mountains’ resources and products to shape a brand for the region that is of international influence and develop a globally famous reputation.

4 Necessity and feasibility of a national central park in the Qinba Mountains

4.1 Importance of a national central park to culture, ecology, and development

Mount Hua, Wudang Mountains, Shennongjia Forestry District, Zhongnan Mountains, Mount Taibai, and many other famous attractions are evidence that the Qinba Mountains region is a place that nurtures Buddhism and Taoism with prominent oriental cultural resource values; it is the original point of the Chinese national cultural value system and the foundation of Chinese civilization. A national central park established there would become an important channel of manifesting oriental cultural meanings, handing down Chinese traditional core values, and promoting the Chinese cultural essence. The selective development of tourism resources, based on ecological function zoning, conservation of ecological resources, and ecological environmental restoration, is an important reason to establish a national central park. Thus, a Qinba national central park could have a positive influence on strengthening regional ecological protection and on protecting the region’s biological diversity. It could effectively promote a regional cultural tourism industry, push forward a regional green (environmentally friendly) economy, and vigorously improve the tourist appeal. It would have great significance for accelerating socioeconomic development and alleviating poverty.

4.2 Foundations for a park: Qinba Mountains’ outstanding ecological, humanistic, and historical resources

The Qinba Mountains region has two world cultural and natural heritage sites, 40 national nature reserves, one world geological parks, 12 national geological parks, 61 national forest parks, and 11 national wetland parks. There are abundant non-renewable and unique resources and the region contains world-class ecological and cultural value. The rich ecology and the historical and cultural resources create unique landscapes of geology, mountains, rivers and lakes, forests and canyons, flowers, and much more. Myths and historical facts, poetry, paintings, carvings, famous towns, folklore, and combinations of these resources give bright, mysterious, grand, and graceful manifestations to the region’s landscapes. In addition, centrally located in the country, with an average forest coverage rate of 57.3%, the region is a central zone of convergence of forest carbon sink and the core supply of oxygen released from plants. Overall, the Qinba Mountains are the ecological green heart of China, in space and function, and the region has all the advantages and conditions needed to establish a national central park.

4.3 Suitability of the model for conservation and use of the resources

After more than a century of development, the US National Park Service is considered an advanced management model to realize mutual benefits for resource protection and development and use. It is an international model of the coexistence of ecological environment and tourism consumption under comprehensive regulation [6].

Although China has yet to clarify its national parks’ naming and management practices, China began to implement a similar national park system as early as the 1950s. In 1982, China launched landscape and famous sceneries’ system construction and published structured lists of national landscape and famous sceneries. In about 1990, the construction sectors for national landscape and famous sceneries began to interpret national landscape and famous sceneries as internationally accepted national parks. The administrative departments managing national forests, land, water conservancy, construction, and historical relics simultaneously affirmed a set of similar national parks within their areas of specialization: National Forest Park, National Geologic Park, National Water Conservancy Scenic Spot, National Urban Wetland Park, National Mine Park, National Archaeological Park, and so on [7]. Furthermore, the existing national nature reserves constructed based on the requirements of core ecological and biological resources protection are consistent with the concept of a national park in their objectives of ecological protection, scientific exploitation, and research. Therefore, the relevant practices show that, although all of the types of national reserves and national landscape and famous sceneries lack the national-park designation, they actually are national parks. The integration of the construction model and requirements of a national park means that China has sound conditions for building national parks of international influence on the current foundations.
4.4 A national central park as a powerful way to initiate China’s park system

Recently, the overall development concept has been fully turned toward ecological civilization. In 2013, the Decision of the Central Committee of the Communist Party of China (CCCPC) on Some Major Issues Concerning Comprehensively Deepening the Reform formally put forward to establish a national park system, which was part of the Party Central Committee’s important measures on homeland space functional utilization, natural and cultural heritage protection, and management. Therefore, in a context of comprehensive and deepening reform, and, based on the requirement to balance protection and use and to collaborate between development and management, a national central park in the Qinba Mountains with Chinese characteristics and global influence is likely to be developed.

In January 2015, the National Development and Reform Commission, Ministry of Environmental Protection, and 11 other ministries jointly issued the Pilot Scheme for Establishing a National Park System, which proposed establishing a unified, standardized, and efficient framework with the objectives of achieving the main goals of protection and public welfare as priorities. The scheme’s clearly stated objective was to establish national park system pilot projects in Beijing, Jilin, Heilongjiang, Zhejiang, Fujian, Hubei, Hunan, Yunnan, and Qinghai. Each pilot province selects its pilot area. The pilot projects last three years and finish by the end of 2017.

Although China has recently conducted some useful exploration for establishing a national park system, the current practices and policies indicate that the national park pilot programs have selected only nine provinces and cities. In striking contradiction to the protection goal, most of the programs chose a provincial jurisdiction as a unit and avoided cross-provincial areas with high ecological resource values. In one respect, a national central park in the Qinba Mountains could provide practical experience for learning about and enhancing the protection and uses of ecological and cultural heritages in interprovincial regions; on the other hand, it could meet the goal of creating national central ecological functional zones as quickly as possible.

5 Ideas and suggestions

5.1 Joint application as a natural World Heritage Site

To improve the Qinba Mountains’ global influence and international fame to a level similar to the Alps and Rockies, the natural and cultural resource values of the Qinba Mountains region, the position the Qinba Mountains as a national key ecological function zone, and its value as the spiritual and natural indicator of Chinese civilization must first be tapped. We should associate with the five provinces and one city to apply to the United Nations Educational, Scientific and Cultural Organization (UNESCO) for official recognition as a world natural and cultural heritage of the region while promoting its natural and cultural resources of international significance, which would enhance the global influence of Chinese civilization. Shaanxi and Sichuan provinces have already jointly applied for the Shu Roads World Cultural Heritage.

5.2 Establishing the Chinese character of a national central park

Because the Qinba Mountains region covers a large area and includes several provinces, natural resources, such as mountains, water, ridges, and plateaus, are continuous in space with inconsistent geographic scope and provincial divisions. The provinces differ regarding development strategies and the protection of resources, and problematic duplicated development efforts often occur. In addition, the region is intended to be one of a few protected areas of significant natural and cultural value because of its rich cultural resources and unique cultural value. Therefore, we should choose existing scenic spots that have solid resource foundations and strong cultural appeal for integration and upgrading, such as world heritage sites, world-class geological parks, national nature reserves, and the national landscape and famous sceneries. Ultimately, we should comprise the Qinba national central park to have 15 core tourist spots: Shennongjia Forestry District, Mount Hua National Park, Zhongnan Mountains National Forest Park, Mount Taihai National Forest Park, Wudang Mountains National Park, Guangwu Mountains-Nuosuihe National Park, Funiu Mountains Global Geopark, Little Three Gorges National Forest Park, Mount Maiji National Park, Baima-Wanglang National Nature Reserve, Baishuijiang National Nature Reserve, Jianmenshuduao Tourism of Jianmen Pass Scenic Area, Foping National Nature Reserve, Baotianman National Nature Reserve, and Gulongzhong Scenic Area. Meanwhile, in line with the construction concept of “protection first, focus on cultivation, area chain reaction, and classified guidance,” the national landscape and famous sceneries should be organized into three categories (natural type, cultural type, and cultural-landscape type) to guide development, which could enhance the international reputation of the Qinba Mountains.

5.3 Rules to protect ecology, wisely use limited resources, and alleviate poverty

The establishment of a Qinba national central park should focus on protection and the sustainable use of national resources as the main target, correctly handle the relationship between protection and development, and rationally develop under the principles of ecological protection. This approach would improve access to China’s natural and cultural resources, promote the development of the regional economy, and lift the local people out of poverty and into prosperity. Therefore, it is necessary to
clarify and improve the top-level design and enact relevant laws and regulations on national parks so that conservation and the use of the ecological and cultural resources of the Qinba Mountains are conducted within a proper legal framework. Based on problems, such as legislative gaps on national parks and duplicated laws and regulations (such as the Regulations of the People’s Republic of China on Nature Reserves and Regulations on Scenic and Historic Areas), that have disparities in legislative objectives and scopes of application, lawmakers have called for a “National Park Law” as soon as possible. However, regulations also are needed to protect and develop a Qinba national central park that mainly focuses on the following solutions to existing problems.

1. There should be coordination between protecting and using ecological and economic benefits, constructing a sustainable model to protecting and using national park.

2. There should be coordination between the crossed over and overlapping relationships between the Qinba national central park and other protected land, and the relationships between the national park and the nature reserves, scenic spots, and national forest parks should be clarified.

3. All types of tourism and economic benefit-oriented development should be abolished in protected areas, led by local governments, and excessive development should be restricted by increasing central financial support, which could feature the public welfare-oriented feature of the national park.

4. The rights, responsibilities, and obligations of the central government, local governments, and management institutions should be clarified regarding the protection and management of the Qinba national central park; the principles and methods of reward and compensation should be commensurate to their contributions.

5.4 Coordinate management and establish unified conservation and leadership among five provinces and one city

In the practices of domestic and international park management systems, robust legislation and intensive regulatory mechanisms are a powerful guarantee of proper construction and management of the contradictions between protection and development of a national park. The Qinba Mountains region covers five provinces and one city, comprising a large land area with nature reserves, scenic spots, and various national forest, geological, and water conservancy zone parks. Thus, the Qinba Mountains national park management system should be created as a pilot program to explore and devise a cross-regional national park management system for China. The existing protection regulations, local laws and rules, departmental jurisdictions, and divisions of powers should be clarified. The nature reserves, scenic spots, and various national forests and geological parks should be part of the national park system and classified using the same criteria. The strengths of protection and development should be determined based on what is being protected and designations should thereby be determined. Innovation in the management system should be a way to achieve breakthrough advancements for developing a Qinba national central park. The five provinces and one city should coordinate to set up a large management institution for the park (such as “Qinba National Central Park Management Authority”) with clear functions, powers, and delegation of responsibilities. That authority would be responsible for providing vertical guidance and management on the various types of parks within its scope and for realizing the “one area, one regulatory agency” principle to resolve the disadvantages created by overlapping regulatory agencies, cross-regional management, and regulatory conflicts.

5.5 Circle of Qinba tourism collaboration

The Qinba national central park could link with a multilevel national central park tourism system because of the large and medium-sized cities surrounding the Qinba Mountains, which could develop the cities of Chongqing, Chengdu, Xi’an, Wuhan, Lanzhou, and Zhengzhou into tourism hubs and integrated service centers for the Park. Internal sub-centers and hubs could be created in cities inside the Qinba Mountains, such as Dazhou, Guangyuan, Hanzhong, Tianshui, Ankang, and Shiyan. The tourism network could feature internal and external links and interconnected elements. Large and medium-sized cities outside the region could supplement the linkages of tourist facilities with Qinba Mountains and regional tourism functions. The internal cities (middle-sized and small cities) could supplement basic tourist facilities and scenic spot tourism functions. This arrangement could ultimately promote networking in the Qinba Mountains region’s tourism services, which could develop into a large tourism services’ circle of collaboration in the Qinba Mountains region.

6 Conclusion

The ecological environment and natural and cultural heritages are humankind’s foundations. In the face of growing environmental crises and people’s growing demands for recreation, it is particularly important to establish sustainable uses of resources and stable management methods. The Qinba Mountains comprise an important region that cannot be ignored in the process of achieving sustainable development and developing an ecologically sound society. The region’s special location, significant ecological value, and rich cultural heritage prominently locate it in a strategic position to achieve sustainable development and a process by which a significant regional ecological civilization could be built. The region is the origin of the great civilizations that made it the spiritual and natural identity of China’s geography. Thus, it is necessary to consider ecological protection and
sustainable uses of resources in the region from a global viewpoint and from the perspective of national strategic development to resolve the outstanding protection and use contradictions, regional coordination and overdevelopment problems, and alleviate the residents’ extreme poverty.

A system of national parks is an important achievement in the development of human civilization. This system has evolved into an effective management method and model innovation being adopted worldwide to solve contradictions among resource protection, economics, and social development, and it aims to balance interests to achieve sustainable development. Establishing a national central park with Chinese characteristics in the Qinba Mountains region is of significant theoretical and practical meaning in terms of ecological environmental protection, Chinese societal heritage, and the promotion of an ecologically sound civilization. However, compared to some other countries, national parks in China have only just begun to emerge, and the national central park in the Qinba Mountains has a long way to go before completion. An array of problems remains to be solved, such as national park legislation, resource classification criteria, ecological compensation, and management system reform and innovation.

References


