

Coordinated Development in Qinba Mountain Area

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Abstract: This study discusses the coordination targets and spatial patterns for the Qinba Mountain Area and aims to provide a reference in terms of regional, spatial, and strategic coordination paths for ecological protection in the core hinterland and green development in the peripheral urban areas in the same area. We adopted an induction and deduction method. We referenced relevant successful projects and areas in China and abroad; analyzed the special values, foundations for development, and strategic missions of the Qinba Mountain Area; and explored the coordinated development paths and the spatial coordination patterns for this area. Furthermore, we propose that the Qinba Mountain Area should be constructed as a demonstration zone for national ecological protection and green and innovative development and that the regional coordination in the Qinba Mountain Area should be incorporated into the targets of a national strategy. A spatial coordination pattern based on a “green heart” model and networked city clusters is also proposed. The green development of the Qinba Mountain Area should be coordinated with the surrounding urban areas to establish a spatial coordination pattern that reflects both the ecological features of this area and the characteristics of the information era; this can be a win-win solution for both ecological protection and green development.

Keywords: Qinba Mountain Area; green development; regional coordination; spatial pattern

1 Introduction

The green and circular development of the Qinba Mountains is important to the foundation of ecological security and poverty alleviation to improve livelihood in China. To that end, implementing the “Two Mountains Theory” and alleviating poverty in the mountain areas must be realized as a key measure and actively explored in the academic field. In 2015, the Chinese Academy of Engineering initiated the “The Green and Circular Development Strategy of the Qinba Mountains” project, aiming to explore a green development path of the Qinba Mountains under the ecological civilization strategy and has provided engineering support for poverty alleviation and the green and innovative transformation of the Qinba Mountains. Existing research regarding the Qinba Mountains is scarce and mainly focused on the Qinling orogenic belt, the Qinling ecosystem, tourism development in Qinling, and agriculture in Qinling. It mostly concentrates on the development of the poor mountain areas and rural construction. From a geological point of view, the Qinling Mountains and the Bashan Mountains originate from the same vein; therefore, they should be considered in a unified way. There is a research gap on the green development of the Qinba Mountains, and most studies are based on the “Research on the Green and Circular Development Strategy of the Qinba Mountains” initiated by the Chinese Academy of Engineering. In the first phase of this strategy, we proposed that “the protection and development of the Qinba Mountains cannot be discussed based on only the Qinba Mountains, and the Qinba Mountains and its surrounding areas need to be comprehensively recognized and judged as a whole” [1]. After this first phase, the necessity of regional coordinated development of the Qinba Mountains and the

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surrounding urban areas has been widely recognized. In the second phase of the project, we have studied the internal coordination mechanism between the Qinba Mountains and its surrounding urban areas to explore a coordinated development path for the Qinba Mountains and to provide impetus for green development through a mechanism that links the internal to external areas. Based on a spatial/regional coordination model, this paper outlines a strategic coordination goal for the Qinba Mountain Area and a spatial organization mode based on the “green heart model” and networked city clusters. It references collaborative development projects that have achieved ecological-urban balance in China and abroad, as well as their internal/external coordination mechanisms.

2 Regional coordination for ecological-urban balance

There are many examples of urban development areas that are sensitive to the ecological environment—that is, development areas that have achieved ecological-urban balance. This paper analyzes such existing collaborative experiences for ecological protection and urban development in areas that are similar to the Qinba Mountain Area. These areas should be used as a reference for the internal/external coordination between the ecology and the cities of the Qinba Mountain Area.

2.1 The Alps and the *Alpine Convention*

The Alps are located in South Central Europe, 1200 km long and 130–260 km wide, covering a total area of about 2.2×10^5 km². The Alps span different countries including northern Italy, southeast France, Switzerland, Liechtenstein, Austria, southern Germany, and Slovenia. Therefore, development processes in the Alps require the coordination of multiple interests. To that end, transnational and cross-regional coordination mechanisms have been formed such as the *Alpine Convention* which involves the European Union (EU) and eight countries (Austria, Germany, France, Italy, Liechtenstein, Monaco, Slovenia, and Switzerland) as stakeholders. Through the implementation of various agreements and declarations, these stakeholders have reached a consensus on ecological protection and urban development, resulting in the unique quality and characteristics of the region [2].

2.2 The Great Lakes and the Great Lakes Megalopolis

The Great Lakes of North America comprise five large fresh water bodies located at the junction of Canada and the United States. They span a total area of about 2.404×10^7 km² and a total shoreline length of 17 017 km. The lakes form a unique water system network and basin ecosystem, accounting for one-fifth of the total surface fresh water in the world. At the beginning of the 20th century, cities in the Great Lakes region rapidly developed and formed the Great Lakes Megalopolis. The Megalopolis covers Cleveland and Pittsburgh from Chicago to the east in the United States, as well as Toronto and Montreal in Canada. It has an east-west span of 1200 km, a north-south span of 900 km, a regional area of 2.45×10^5 km², and a population of more than 50 million. It plays an important role in the development of the western part of the United States and the balanced development of its territory. The region boasts the highest level of industrialization and urbanization in North America. Its steel and automobile production account for 60% of that of North America [3]. Furthermore, it is an important agricultural and fishery base in the United States and Canada. However, rapid industrialization and urbanization have caused serious environmental pollution problems in the Great Lakes region. In 1909, the United States and Canada jointly formulated the *Boundary Waters Treaty*; in 1972, they signed the *Great Lakes Water Quality Agreement*; and in 1985, after negotiations and consultations, they signed the *Great Lakes Charter*. Through these efforts, they cooperatively determined constraints regarding the protection of the regional water environment, actively promoted the industrial transformation of cities in the region, and vigorously supported the service industry. After the coordinated adjustments, the industrial structure of the Great Lakes Megalopolis has undergone a major transformation. The service industry has come to account for more than 30% of the industry. Thanks to the restrictions imposed by these regional cooperation agreements, the region has achieved better coordination in water governance and protection as well as industrial transformation, and the two countries have promoted the protection and governance of the region’s ecological environment.

2.3 The Bohai Bay and the Bohai economic circle

The Bohai economic circle covers three major urban agglomerations: Beijing–Tianjin–Hebei, South Central Liaoning, and Shandong Peninsula, and includes Beijing, Tianjin, Hebei, Shandong, and Liaoning. It covers an area of 5.23×10^5 km² and recorded a gross domestic product (GDP) of 16.10 trillion yuan in 2015, accounting for 23.49%

of China's GDP. The Bohai economic circle is an important base of agriculture, heavy chemical industry, processing and manufacturing industry, and modern service industry in China. Among these, steel, petrochemical, and shipbuilding industries maintain a dominant position in the country; and emerging industries such as information technology, financial business, cultural creativity, and modern tourism are rapidly developing [4]. The coordinated development of the Bohai economic circle is of great significance in promoting the development of the Bohai Bay port cluster and in accelerating the integrated strategic system for the national land and seas. The core of the Bohai economic circle is the Beijing–Tianjin–Hebei region, which is important in terms of national spatial strategy in China. The region carries out a series of important missions such as relieving non-capital functions. The spatial coordination of the Bohai economic circle is centered on Beijing–Tianjin–Hebei while the Shandong Peninsula and South Central Liaoning constitute its two wings. The center and the wings form a “3 + 2” spatial coordination strategy. In 2015, the State Council approved the *Outline of Cooperation and Development in the Bohai Economic Circle*, to promote cooperation among the provinces, cities, and districts in the region through policy coordination at the national level. This effort established a foundation for the ecological protection, industrial coordination, and urban development of the Bohai Bay coastal area and the surrounding areas.

To sum up, similar to the Alps, the Great Lakes, and the Bohai Bay, the Qinba Mountain Area is a typical development area with an ecological-urban balance. We can learn from collaborative experiences of others, form a cross-administrative sustainable development community at the national level, increase the protection measures for the natural ecological and cultural integrity of the Qinba Mountain Area, and promote the coordinated development of surrounding urban areas. Through the establishment of an effective mechanism, a national park-led, protected land system can be formed; the implementation of ecological protection policies and measures can be supervised; regional industrial transformation and green economic development can be promoted; and the role of ecological protection and innovative development can be established and demonstrated.

3 An analysis of the internal and external links of the Qinba Mountain Area

3.1 Definition of the research object

The research object of this paper is the Pan Qinba Area, a region of the Qinba Mountain Area and its peripheral urban areas. It includes three spatial levels: the inner Qinba Mountain Area, the outer Qinba City Area, and the inner and outer Pan Qinba Region.

3.1.1 The Qinba Mountain Area

The Qinba Mountain Area refers to the core mountain hinterland of the Qinba Mountain, stretching for more than 1000 km from east to west, with a total area of about 3.1×10^5 km² and a total population of about 61.64 million. It comprises 20 districts in Henan, Hubei, Chongqing, Shaanxi, Sichuan, and Gansu, and 119 counties (district and county-level cities) in the Gannan Tibetan Autonomous Prefecture and the Shennongjia Forest District in Hubei.

3.1.2 The Qinba City Area

The Qinba City Area refers to the peripheral urban area around the Qinba Mountains, where the Qinling–Bashan Mountains form the basis for common ecological resources. It involves four major urban agglomerations: Chengdu–Chongqing, Guanzhong, Zhongyuan, and the middle reaches of the Yangtze River. It includes 26 cities (excluding county-level cities) including Chongqing, Chengdu, Deyang, Mianyang, Guangyuan, Guang'an, Suining, Xi'an, Baoji, Weinan, Wuhan, Yichang, Xiangyang, Jingmen, Xiaogan, Jingzhou, Suizhou, Zhengzhou, Luoyang, Pingdingshan, Sanmenxia, Nanyang, Xinyang, Zhumadian, Lanzhou, and Tianshui.

3.1.3 The Pan Qinba Region

The Pan Qinba Region refers to the spatial region formed by the Qinba Mountain Area (inner mountain area) and the surrounding urban area (outer urban belt).

3.2 Relationship between the inside and outside of the area

The green development of the Qinba Mountain Area relies on the interaction between the hinterland of the Qinba Mountain and the surrounding Qinba City Area. The ecological protection of the Qinba Mountain Area must be maintained by the joint efforts of the hinterland and the surrounding urban area. The consistency of development and protection not only involves the functional divisions of the hinterland of the Qinba Mountain and the Qinba City Area but also emphasizes the relationship of mutual support, promotion, and integration towards a common goal.

Therefore, the development of the Qinba Mountain Area must coordinate internal and external development; it cannot be discussed based on only the Qinba Mountains.

(1) The hinterland of the Qinba Mountain Area is the ecological conservation and resource supply area of the Qinba City Area. The Qinba Mountains provide ecological support for the development of surrounding cities as a water, carbon and oxygen, urban air channel, and microclimate source. The Qinba City Area is the first beneficiary of the ecological resources supplied by the Qinba Mountains.

(2) The Qinba City Area bears the population transfer and industrial upgrading in the hinterland of the Qinba Mountains. There is a prominent contradiction between people and land in the hinterland. Some mountainous areas still host industries that are harmful to the environment, such as metallurgy, mining, and chemical industries. The population and the industries that are incompatible with the environment must be reasonably dispersed in the hinterland. The Qinba City Area directly bears the distribution of population and some industries in the mountainous areas.

(3) The hinterland of the Qinba Mountains faces problems such as the extensive use of traditional industrial resources, the internal industrial structure, and technological upgrading of the mountainous areas, which rely on the technical and capital support of the Qinba City Area.

(4) The Qinba City Area provides comprehensive guarantees for the implementation of the Qinba Mountain protection policy. The ecological assessment, evaluation, and compensation mechanism; flow control; and negative listing in the hinterland of the Qinba Mountains require the lead and consensus of peripheral central cities.

(5) The Qinba City Area provides a huge direct market for ecological products produced in the hinterland of the Qinba Mountains. Many organic agricultural, undergrowth, and eco-tourism products from the hinterland of the Qinba Mountains need a huge consumer market support. As the nearest consumer market, the surrounding Qinba City Area serves as a consumer market for these ecological products.

4 The strategic goals of coordinated development in the Qinba Mountain Area

4.1 The strategic value of the Pan Qinba Region

The strategic value of the Pan Qinba Region is reflected in the following four aspects.

(1) The urban area around Qinba balances the development of China's land. Most of China's population (94%) is concentrated in the east of the Hu Huanyong Line while the urban construction is scattered around the west. Under the background of the Belt and Road and balanced development projects, something must bear the function of opening to the west and creating balance. The Qinba City Area, especially Xi'an–Chengdu–Chongqing, could take on this mission of national and spatial significance.

(2) The Qinba City Area is the center of the strategic pattern of regional spatial development in China. Under the new geopolitics, the pattern with two horizontals and three verticals is further strengthened. The central and western regions must have urban clusters that can undertake the core function of opening to the west, to demonstrate certain development patterns: China pays equal attention to the eastern and the western regions, multi-directional opening, land and sea integration, and north–south integration. The Qinba City Area is located at the center of the pattern; thus, it plays an important role in the east–west transmission and north–south coordination.

(3) The Qinba City area is an important hub for China in realizing the multi-directional opening of the Belt and Road. The area is connected with the hub area of the Silk Road Economic Belt in the north (Xi'an, Lanzhou); reaches the gateway of the Silk Road Economic Belt, Xinjiang, in the west; reaches the central supporting areas of the Yangtze River Economic Belt, (Chongqing, Wuhan) in the south; and is connected with the two bridgeheads of the Maritime Silk Road, Kunming and Nanning, through Guiyang. In other words, it connects the Silk Road Economic Belt, the Yangtze River Economic Belt, and the Maritime Silk Road.

(4) The hinterland of the Qinba Mountains has special geographical, biological, and cultural value. The Qinba Mountains constitute a dividing line in terms of climate, between the north and the south of China's land, and the watershed of the Yellow River and the Yangtze River. It is a clean water source and an outstanding gene pool of biodiversity at the heart of China's land territory. It hosts more than 6000 kinds of animals and plants, including more than 120 kinds of nationally protected animals and rare plants, such as the national treasure—the giant pandas, Crested Ibis, golden monkeys, and antelopes. Therefore, the area plays an important role in the protection of species genes. In addition, the area hosts about 17 human sites, such as the Zhengzhou County, Longgang, Lantian, Luonan, and Dali; and more than 20 mythological sites of Chinese ancestors in the Qinba Region. It is a significant religious place in China, with many religious, ancestral halls, and a unique reclusive culture.

4.2 Regional goals of coordinated development

Considering the Qinba Region's characteristics and strategic value, its protection and development is important for the foundation of China's national ecological security, national social stability, and the balance of land spatial pattern. Therefore, this paper proposes that the overall collaborative goal of the Pan Qinba Region should be to protect the national ecology and demonstrate green and innovative development.

Simultaneously, considering that the Qinba Region includes five provinces and one city, regional coordination is restricted due to administrative barriers and requires coordination at a national administrative level. Therefore, we believe that ensuring ecological protection and demonstrating green and innovative development in the Qinba Region should be a part of national strategy and that an effective mechanism for coordinated development should be built at a higher level to achieve a high-quality win-win situation for regional ecological protection and "green" poverty alleviation.

4.3 Necessity and feasibility of a national strategy

4.3.1 The necessity of transforming the coordinated development of the Qinba Mountains into a national strategy

First, the Qinba Mountain Area has significant geographical, ecological, and cultural value. It is located at the center of China's land territory. It is the core ecological barrier and is a water-source dependent area. It could serve as an important ecological foundation to ensure the basic ecological functions of water and carbon sink in the Middle East. Second, the urban area around Qinba is a key area for the balanced development of the country's space and the hub of the Belt and Road. Only through cooperation and coordination among the urban agglomerations can the historical mission entrusted by the new era be completed. Third, the construction of a pilot area for ecological protection and green and innovative development in the Pan Qinba Region can effectively protect the Qinba Mountains in all aspects. Furthermore, these goals can only be achieved if the construction is considered as a national strategy that practices the ecological civilization concept, and if a unified regional coordination mechanism is formed. The internal/external coordination of the development of the Qinba Mountains involves many aspects, such as ecological compensation, population dispersion, industrial division of labor, and scientific and technological support. The relevant coordination strategy must be specified at the national level.

4.3.2 The feasibility of transforming the coordinated development of the Qinba Mountains into a national strategy

First, the development of information networks, rapid transportation systems, and the new economy enables "networked city clusters" at a larger scale and through a discontinuous space. Relying on the "networked city clusters," we can build green areas across a large scale and form a new type of urban cluster development mode that would be dominated by ecological protection, highly efficient network links, tandem cluster axis space, and a unique coordination mode.

Second, the factor flow among the central cities around Qinba, such as Xi'an, Chengdu, and Chongqing, has become more frequent. The spontaneous market behavior shows that the regional coordinated development has reached a critical period. In this study, the data on enterprise contact degrees in 2014, 2017, and 2019 were selected for analysis, and the results revealed that the density of interaction among the six major cities is rapidly increasing (Fig. 1). Among them, Chengdu has the highest link strength with the other five cities in the communication network; and the first-line connection degree of Zhengzhou–Xi'an–Lanzhou displays the fastest growth, reflecting that the driving force of the Belt and Road policy has a greater impact on urban connectivity. Data analysis of foreign investment in major urban enterprises in 2014, 2017, and 2019 reveals that information exchange among the six major cities in the Qinba Region is rapidly increasing and that Chengdu, Chongqing, Xi'an, and Wuhan are in the second-class contact strength echelon, with a good degree of development. Furthermore, the "networked city clusters" effect is budding. Third, from the perspective of population-flow trends, although the three major eastern regions are still the main population-flow areas since 2010, the population growth in the central and western regions began to steadily increase, with Chongqing, Zhengzhou, Wuhan, Chengdu, Xi'an, Changsha, and other provincial capitals as the main cities, forming a population-growth pattern of "three major regions in the eastern and six major cities in the central and western regions." Finally, the opening of the Xi'an–Chengdu high-speed railway initiated close cooperation among Xi'an–Chengdu–Chongqing. The ticket purchase data of the Xi'an–Chengdu high-speed railway shows that the interaction of "Xi'an–Chengdu–Chongqing" freight flow and information flow is increasingly prominent.

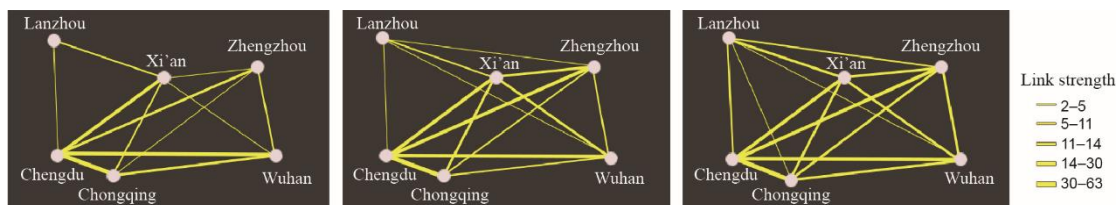


Fig. 1. Comparison of the degree of connection between the six central cities from 2014 to 2019.

5 Discussion on the spatial coordination mode of the Qinba Region

5.1 Construction of a spatial structure pattern based on the green heart model

5.1.1 A spatial coordination model based on the green heart model

Based on the relationship between the mountainous areas of the Pan Qinba Region and the Qinba City Area, the implementation of ecological protection measures and successful transformation to a green and circular development in the hinterland of the Qinba Mountains depend on the bearing, radiation, and support by the Qinba City Area. “The Green and Circular Development Strategy of the Qinba Mountains (Phase II)” inherits the spatial development model of the Qinba regional green heart model proposed in the first phase of the project [5]. That is, the Qinba Mountain’s ecological core area is dominated by green space, urban and rural industrial innovation space is intensive, and the population is gradually dispersed outwards. The surrounding urban areas, as important development clusters, cooperate with each other to build a green, bead-like, cluster-axis type of urban development belt.

The green heart model (Fig. 2) will build a coordinated development pattern that ensures efficient circulation of elements between the hinterland of the Qinba Mountains and the Qinba City Area, realization of the driving support of the Qinba City Area for the hinterland of the Qinba Mountains, further strengthening of the supporting role of the Qinba City Area for the ecological protection of the Qinba Mountains, and the supply of green ecological resources of the Qinba Mountains to infiltrate the external urban areas.



Fig. 2. Green heart model for the Qinba Region.

There are two important aspects in the green heart model. First, ecological protection and construction of the green heart in the hinterland of the Qinba Mountain Area must be highlighted. Second, centralized and continuous development of the surrounding urban areas should be avoided; instead, they should form a cluster-axis type of urban layout with greater dispersion and less concentration. This mode inevitably requires deep cooperation among regions to improve the comprehensive efficiency of the whole urban cluster.

5.1.2 Transmission mechanism of the green heart model

The green heart model guides the formation of a three-stage transmission mechanism for internal and external energy linkage.

Primary stage: The central cities near the mountain are fully involved in the development of the peripheral urban agglomerations. The prefecture-level cities such as Longnan, Shangluo, Pingdingshan, Shiyan, Longnan, and Ankang were incorporated into the four urban clusters of Chengdu–Chongqing, Guantian, Central Plains, and the middle reaches of the Yangtze River. The key function of primary-stage transmission is to actively participate in the

division and cooperation of major urban agglomerations according to the ecological preconditions and resource characteristics of the near-mountain central cities; to determine their own positioning; to share the dividends of the rapid development of the central and western urban agglomerations; and to fully drive industrial transformation, economic development, and talent construction in the near-mountain cities, with the overall efforts of the urban agglomerations.

Secondary stage: The second stage of the mechanism comprises the main body of the organization. The central cities that are involved in the development of urban agglomerations assume the main responsibility for the transformation to a green and circular development mode in the hinterland of the Qinba Mountains and use it as a guide to further organize the transformation and development of Zhouzhi, Lantian, Taibai, Meixian, Fengxian, Zhashui, Zhenan, Shanyang, Shangnan, and other grassroots cities. The key function of the secondary-stage transmission is to organize the establishment of a green and circular development mode, which involves industrial transformation, reconstruction of urban-rural space, ecological protection and sustainable development, among others. It is an important component of the demonstration zone for “characteristic, innovative, green development.”

Tertiary-stage transmission: The third stage of the mechanism comprises the network pivot from the bidirectional flow of internal and external elements. Basic county towns in and out of the mountains, such as Zhouzhi, Lantian, Taibai, Meixian, Fengxian, Zhashui, Zhen'an, Shanyang, and Shangnan are built to form the relevant elements of the Qinba Mountain ecological protection and the peripheral central cities, to support the economy of the Qinba Mountains network. The construction of the network fulcrum of grassroots cities is the key to the flow of factors inside and outside the Qinba Mountains and will be directly radiated by the development of large city clusters.

5.2 Construction of spatial organization mode based on networked city clusters

5.2.1 Model compatibility of networked city clusters and the Qinba Mountains

Appropriate urban scale is the foundations to an objective development of a mountain-city symbiosis. The Qinba Region should avoid super large-scale urban agglomerations or urban contiguous areas such as the Yangtze River Delta and the Pearl River Delta. With the development of information technology, all things will be interconnected including urban and rural areas, which provides new development conditions for urban areas that cannot achieve spatial continuity and require strong collaboration. For the Qinba Region, the continuous ecological area, limited town points, and a fast channel connecting the towns will form a new spatial development mode of “networked city clusters” with the support of information and network technologies.

5.2.2 Construction steps and paths of networked city clusters

The first stage: This involves building the core sector. Relying on the close relationship between Xi'an, Chengdu, and Chongqing, the Central Plains city agglomeration and the Chengdu–Chongqing urban clusters together can form the “Xi'an–Chengdu–Chongqing” sector that can radiate the entire western region; effectively support the growth pole of the Belt and Road westward development hub; and balance the development of the space between the east and the west.

The second stage: This involves an axial sector. Based on the “Xi'an–Chengdu–Chongqing” sector, the west of the region further strengthens the link between Xi'an and Lanzhou, forms the “Xi'an sector,” highlights the important role of the two in the Silk Road Economic Belt, and forms the east–west axial hub gateway area of the road that connects China's western regions to inland regions. Simultaneously, the connection between Zhengzhou and Wuhan is strengthened in the east and form the “Zhengzhou–Wuhan sector” to strengthen the interaction between the Central Plains city clusters and the city cluster in the middle reaches of the Yangtze River as the hub of regional industries, talents, science, and technology in the central regions of China, spreading to the western regions.

The third stage: This involves a cluster sector. Based on the core sector and the axial sectors, the cooperation between the central cities and the urban agglomerations is further deepened, forming three cluster sectors. Through further extension of Zhengzhou, Xi'an, and Lanzhou in the east–west axis, the Central Plains city clusters and the Guanzhong Plain city clusters are linked to form a fast channel for the eastern elements to transmit radiation to the western regions. The “Xi'an–Chengdu–Chongqing” sector further connects with Lanzhou, strengthens the westward function, and becomes an important urban area that balances national space and strengthens the integration of multiple elements of the Belt and Road. The “Xi'an–Chengdu–Chongqing” sector is connected with the “Wuhan–Zhengzhou” sector, forming a new pattern of coordinated development of regional growth poles in the western region and the city clusters in the central region.

Through the above-mentioned process, the peripheral cluster layout, network connection, and regional

coordinated development will be gradually formed. This process will support the ecological foundation of the inner Qinba Mountain hinterland and seek a new type of city-cluster form of regional division and interaction.

6 Conclusion

This research reveals the outstanding ecological, regional, and cultural value of the Qinba Mountain. We should learn from domestic and foreign experience, and build a demonstration zone for green and collaborative innovation in Qinba as a national strategy to overcome potential administrative barriers to collaboration. Based on the geographical structural characteristics of the area's ecological-urban balance, a spatial coordination mode should be developed, based on the green heart model and networked city clusters.

The Qinba Region, as a development area with an ecological-urban balance, has special strategic significance in China. Therefore, the area's development strategy should be upgraded to a national development strategy. On the one hand, it can attract the population and industries in the ecologically sensitive areas of the Qinba Mountains to transfer to and gather around the surrounding cities, which is conducive to fundamentally addressing ecological protection and poverty of the Qinba Mountains and enabling the Qinba Mountains to serve as an ecological barrier. On the other hand, the Qinba Region can better balance the development of land and space, play a pivotal role in the Belt and Road, and form a new growth cluster that will drive the rise of the central and western regions to radiate the overall western land. As such, the Qinba Region will become not only a model for green solutions to poverty alleviation in China but also China's first large-scale regional development project demonstrating prominent features of ecological protection.

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