Development patterns and cooperation paths of tourism industry within the China–Mongolia–Russia Economic Corridor

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Abstract. Strengthening tourism cooperation in border areas along the China–Mongolia–Russia Economic Corridor (CMREC) are important and challenging, under “Belt and Road” (B&R) initiative. Research has constructed a tourism competitiveness evaluation model including three dimensions and based on six factors: natural resources, cultural resources, tourism market, social economy, traffic facilities, and policy support. The results show the spatial characteristics of tourism competitiveness ordered as Beijing–Tianjin–Hebei of China, Northeast China, Northwest China, Russian Siberia Federal District, Mongolia, Russian Far East Federal District, and Russian Ural Federal District. Data show that the average tourism competitiveness of the three areas in Northern China are 2.69 times those of the three Russian areas, and 1.74 times those of Mongolia; at the same time, the average tourism competitiveness of Mongolia is 1.54 times that of the three areas of Russia. Based on the evaluation result, this study proposes a theoretical framework for a competition–cooperation model for tourism within the CMREC. Cluster analysis shows that the seven areas are comprise of absolutely dominant regions, comparatively dominant regions and comparatively weak regions. Tourism strategies are proposed in this study, based on the theoretical framework for a competition–cooperation model.

1. Introduction

The China–Mongolia–Russia Economic Corridor (CMREC) is one of the core areas within six economic zones those identified as part of the Chinese “Belt and Road” (B&R) initiative. The cross-border areas within the B&R encompass complex and diversified geographic environments, and contain abundant natural and human resources for tourism. These areas also comprise a series of important international channels that link the Eurasian continent with Chinese regions that will enable the countries to open up to the north [1]. Channels within the B&R include cultural highlands in Northeast Asia are a key for the conservation of global biodiversity, and important to the goal of the World Tourism Organization (WTO) to strengthen international cooperation along the Silk Road. Thus, in 2016, China, Mongolia and the Russian Federation signed the Outline of Planning for the Construction of China-Mongolia-Russia Economic Corridor, symbolizing the formal implementation.
of the first multilateral economic cooperation corridor along the B&R [2]. This corridor was mainly constructed to connect the Chinese Silk Road Economic Belt, the Russian Eurasian Economic Union, and Mongolia’s proposed “Prairie Road” [3]. The CMREC emphasizes areas such as expanding human communications and deepening tourism cooperation, and aims to encourage the three parties to reach their tourism resource potentials, take international cooperative advantages, expand economic development space, and raise the joint competitiveness of the nations involved in the international tourism market [4]. According to regional economic and ecological theory, competition and cooperation usually co-exist in regional tourism development, it has an important theoretical significance and practical value to evaluate the tourism competitiveness within the border areas between China, Mongolia, and Russia. This paper explores a competition and cooperation development model for the CMREC, with the aim of promoting the initial joint development of tourism along the B&R.

2. Models and Methods

2.1. Study Area
The scope of this research gives priority to the border areas of the CMREC, encompassing a total area of around 2307,000 km² (including 4322,000 km² within China, 1314,000 km² within Russia, and 1564,000 km² within Mongolia), see figure 1. According to the principle of comparing similarities between natural geographical environments and social economic conditions, the study areas are divided into seven large tourism zones, the Beijing–Tianjin–Hebei Region (Beijing City, Tianjin City, and Hebei Province of China), the Northeast Region (Heilongjiang Province, Jilin Province, and Liaoning Province of China), and the Northwest Region (Inner Mongolia Autonomous Region, Gansu Province, and the Xinjiang Autonomous Region of China), the entirety of Mongolia (Ulan Bator City and 21 provinces), and the Federal District of Ural (Tyumen Oblast, Sverdlovsk Oblast, and Perm Krai of Russia), the Federal District of Siberia (Zabaykalskii Krai, Republic of Buryatia, and Irkutskaya Oblast of Russia), and the Federal District of the Far East (Primorskiy Krai, Khabarovskii Kray, and Amurskaya Oblast of Russia).

2.2. Data collection
The year 2015 is used as a benchmark in this study, and resource data was collected by a global level, including the Directory of World Natural and Cultural Heritages publicized by United Nations Educational Scientific and Culture Organization (http://unesco.org), the Directory of World Biosphere
Reserves, Non-material Cultural Heritage, World Geoparks, World Museums under the “Man and the Biosphere Programme”, Globally Important Agricultural Cultural Heritage Systems as published by the United Nations Food and Agricultural Organization (FAO) (http://www.fao.org), and Internationally Important Wetlands as published by the Internationally Important Wetland Convention Organization (https://rsis.ramsar.org). In addition, data from the tourism market, the social economy, and traffic facilities were sourced from the WTO, the World Travel & Tourism Council (WTTC), the Statistical Yearbook 2016 of China, the Statistical Yearbook 2016 of Mongolia, and the Statistical Yearbook 2016 of Russia. All data for supporting policies were evaluated using the Google Index method.

3. Results and Discussion
The tourism competitiveness evaluation of seven tourism regions within the CMREC is divided into a comprehensive evaluation and three dimension evaluation (resources dimension, market dimension, and environment dimension). Thus, clarifying the status occupied by each tourism region as well as the roles and functions in the whole CMREC, it provides the scientific basis for promoting a high-efficiency international tourism industry and provides a future direction for a competition–cooperation model.

3.1. Comprehensive evaluation of tourism competitiveness
3.1.1. Evaluation of comprehensive tourism competitiveness. The tourism competitiveness of China is significantly higher than that of either Russia or Mongolia. Indeed, the tourism competitiveness of the Beijing–Tianjin–Hebei Region is the strongest, while that of the Russian Federal District of Ural is the weakest. The seven tourism regions placed in the following sequence from strongest to weakest: Beijing–Tianjin–Hebei Region (China); Northeast Region (China); Northwest Region (China); Federal District of Siberia (Russia); Mongolia; Federal District of the Far East (Russia); Federal District of Ural (Russia) (figure 2).

![Figure 2. Comprehensive evaluation of tourism competitiveness.](image)

3.1.2. Evaluation of average tourism competitiveness. The average tourism competitiveness of the Chinese regions considered is 2.69 times that of the Russian regions, and 1.74 times that of the Mongolian regions. At the same time, the average tourism competitiveness of Mongolian regions is 1.54 times that of the Russian regions. The average tourism competitiveness of the Beijing–Tianjin–Hebei Region, the Northeast Region, and the Northwest Region within China is 0.485, while the
corresponding value for Mongolia is 0.278, and 0.180 for Russian Federal Districts of Ural, Siberia, and the Far East. Therefore, the general trend of average tourism competitiveness from strongest to weakest is China, Mongolia and Russia.

3.2. Dimensional evaluation of tourism competitiveness

As discussed above, the concept of a “multi-dimensional hyper-volume” of tourism competitiveness originates from the combined action of numerous factors, including resources, markets, and environmental dimensions. The characteristics of each dimension reveal the relative development advantages and disadvantages within seven tourism regions.

3.2.1. Evaluation of market dimensional factors.

The tourism market within China has huge advantages over other two countries [5]. The total number of tourists and income of the China tourism industry account for 98.12% and 97.86%. The number of inbound tourists within the Chinese sector of this industry is 42.1 times that of the Mongolian sector and 82.8 times that seen in Russia. The inbound tourism income of the Chinese sector of this industry is 50.4 times that of the Mongolian sector and 140.0 times that seen in Russia. Mongolia is the most open of the three countries in terms of tourism services, while Russia has a chronic trade deficit in this industry. There has been a decrease year-on-year in the development of the tourism industry in Mongolia, even though this country is the most open to the outside world in terms of tourism services.

3.2.2. Evaluation of environment dimensional factors.

This dimension includes social economic, location traffic, and support policy environments. These factors have a total contribution rate of 0.242 to the overall tourism competitiveness of the CMREC, and individual rates of 0.062, 0.066, and 0.114, respectively. In the first place, the overall tourism development environment of the Chinese sector is superior to that seen in Mongolia and Russia. Tourism development has been actively promoted in Mongolia, albeit limited by the national social economic level, while Russia has lagged behind in the construction of traffic infrastructure and lacks supporting policies for tourism development. Secondly, it is clear that restrictive factors promoting the development of tourism within the three CMREC regions are different. The three regions of Northwest China exhibit a minimum social economic level and lack relevant policy support, while severely insufficient for traffic facilities are concentrated obviously within the Russian Federal District of Ural [6].

4. Conclusion

Based on the evaluation results of tourism competitiveness, each tourism region within the CMREC occupies a certain space that cause the competition of tourism regions, but the international tourism cooperation will lead to realize the sustainable development of the CMREC [7]. Based on the evaluation comprehensive of tourism competitiveness and cluster analysis, the competition–cooperation tourism model for the CMREC are proposed tends to exhibit a “spindle-shaped” trend of development and exhibits a competitiveness distribution that conforms to a “1-4-2” structure. The Class-I absolutely dominant areas identified are led by the Beijing–Tianjin–Hebei Region and act as growth poles for regional tourism development, driving and radiating benefits into surrounding areas, and generally promoting tourism development within the CMREC. In contrast, the Class-II comparatively dominant areas identified, the three provinces of Northeast China, the three provinces of Northwest China, as well as Siberia and Mongolia, also perform the same driving and radiating functions as their Class-I area counterparts. Due to their own inherent advantages, these regions also link to the Russian Far East and Ural areas that are classified as Class-III regions in this study and complete the competition–cooperation within the CMREC.

4.1. Promoting the cooperation mechanism as Triangle Center

The Chinese National Tourism Administration, the Russian Economic Development Department, and the Mongolian Tourism Bureau have promoted the establishment of a “China–Mongolia–Russia
Economic Corridor Tourism Cooperative” as the main mechanism for the implementation of their cooperation in “developing cultural communication” as laid out in the *Outline of Planning for the Construction of China–Mongolia–Russia Economic Corridor*. This collaboration also aims to establish secretariat divisions in Beijing (China), Irkutsk–Ulan–Ude (Russia), and Ulan Bator (Mongolia) to form a “Triangle Center” that will radiate and drive benefits into regions which are currently relatively weak in tourism [8]. These organizations have the responsibility for planning tourism development within the CMREC, in particular jointly negotiating and discussing policies for tourism cooperation, organizing and promoting market research, developing routes, recommending regions and communicating with these areas as well as with cities, enterprises, and social organizations along the pipeline, undertaking joint marketing and promotional activities, and implementing tourism cooperation projects and investment plans.

4.2. Optimization of tourism resources as resource-space-dislocation strategy

The aspiration of tourism development within the CMREC is to create a series of tourism regions that comprise “One Heart, Three Belts, Four Kernels, and Seven Blocks”. Thus, within this structure “One Heart” will comprise the core Beijing–Tianjin–Hebei Region while the “Three Belts” consists of the China–Russia Ecological Tourism Belt (i.e., three provinces in Northeast China, Russian Far East, Siberia, and Ural), the China–Mongolia Cultural Customs Tourism Belt (i.e., Beijing–Tianjin–Hebei, Inner Mongolia, Mongolia, and Lake Baikal), and the China–Mongolia–Russia Ancient Silk Culture Tourism Belt (i.e., Beijing–Tianjin–Hebei, Gansu, Xinjiang, Mongolia, Ural) [9]. The “Four Kernels” within the model therefore comprise the city of Vladivostok in the Russian Far East, Lake Baikal in Siberia, and the city of Ulan Bator in Mongolia, as well as the internal border areas of China, Mongolia, and Russia [10]. Finally, the “Seven Blocks” within this model are the Beijing–Tianjin–Hebei Chinese National Culture Block, the Northeast Region Leisure and Holiday Block, the Northwest Region Ancient Silk Road Block, the Mongolia Humanistic Tourism Block, the Siberia Lake Baikal Ecological Tourism Block, the Far East Coastal Natural Experience Block, and the Ural Near Polar Circle Natural Tourism Block.

4.3. Enhancing international market as market-stimulation-generalization strategy

One of development within the CMREC goal should be to jointly enhance the competitiveness of the international tourism market, to cultivate the international common brands of “Silk Road and Tea Road”, as well as to develop, design, and integrate a series of international cross-border tourism routes that could include mass sightseeing, the preservation of health, vacations, business surveys, family self-driving, and outdoor adventure tourism [11]. It will also be necessary to simplify visa and customs clearance processes for inbound tourists to relevant cities within China, Mongolia, and Russia, as well as to add mutual visa exemptions and on-arrival application procedures for international tourists, strengthen the connectivity and availability of routes, enable efforts to improve the tourism, leisure, and holiday functions of border cities within the three countries, and enhance the diversity and characteristics of tourism products.

The clear goal of strategy in this area is to develop a CMREC tourism industry belt via a “big tourism model” that will replace traditional industries with this endeavor at the economic forefront, linking primary, secondary, and tertiary industries. This will be achieved by optimizing industrial structures and constructing a large-scale tourism industry system that encompasses the various components as nodes linked together within a chain. Node cities are taken as central points with their corresponding trunk traffic lines as axles that connect points together to enable high-speed railway routes, airway express deliveries, and maritime transportation. It is therefore important to emphasize the construction of infrastructure and tourism service facilities in this context, to interconnect node cities and large scenic spots to enable natural-ecological as well historical-human tourism along the Ancient Silk Road and the Siberia Big Railway. High-speed railway routes connecting Asia-Pacific and European international tourism cities should also be developed to mitigate the highway traffic barriers to international development within the CMREC. Finally, it is also critical to promote the
construction of comprehensive mechanisms to guarantee safety in order to protect cross-border and cross-regional tourism between China, Mongolia, and Russia. These measures should include mechanisms to ensure the personal and property safety of tourists, while at the same time emphasizing the protection of local environments within the three countries as well as the necessary means to rescue tourists in emergencies.

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