

Research on Development Status and Countermeasures of Forest Recreation Industry in Liaoning Province

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Abstract: Liaoning Province is rich in forest resources and has a pleasant climate. The local government has been actively applying and developing the forest resources in this region rationally, and has continuously promoted the construction of forest recreation base and made certain achievements. In recent years, with the improvement of people's health awareness and the change of life style, the market demand is gradually increasing, and forest recreation, as a new health industry, has gradually received attention in Liaoning Province and even the whole country. Based on the analysis of the development status of the forest recreation industry in Liaoning Province, this study aims to analyze the existing problems of the industry development and put forward corresponding optimization countermeasures and suggestions, so as to promote the sustainable development of the forest recreation industry and provide reference suggestions for promoting the further development of the forest recreation industry in Liaoning Province.

Keywords: Forest Recreation, Industrial Development, Optimized Countermeasure

1. Introduction

In 2019, four departments jointly issued the "Opinions on Promoting the Development of Forest Recreation Industry", which proposed that by 2035, 1,200 forest recreation bases should be built to provide multi-level, diverse, and high-quality forest recreation services to the public; by 2050, the forest recreation service system will be more complete, and the concept of forest recreation will be deeply rooted in people's minds, with the public enjoying more comprehensive forest recreation services. In January 2022, the "14th Five-Year Plan for Forestry and Grassland Development in Liaoning Province" pointed out that ecological landscape resources such as forests and wetlands should be fully utilized to develop forest recreation industry, strengthen the construction of forest recreation industry infrastructure, and promote file upgrading [1]. Under the active promotion of the state, the forest recreation industry, as an emerging forest recreation service sector, has enjoyed rapid and sustained development. Liaoning Province boasts rich natural and forest resources, which, combined with its favorable ecological environment and diverse human and cultural heritage, provides a good opportunity for the development of forest recreation industry. However, in the process of development, it also faces some challenges that need to be seriously analyzed to find solutions to the problems and formulate more targeted development strategies. The forest recreation industry in Liaoning Province currently faces problems such as a small industry scale, insufficient marketing capabilities, an incomplete policy support system, limited investment and financing channels, a lack of professional personnel, uneven service levels, and an imbalance between ecological environmental protection and industrial development. To promote the further development of forest recreation industry in Liaoning Province, this paper starts by analyzing the current status of the industry in Liaoning Province, then identifies the existing problems, and finally, provides reference and thinking from five aspects, including strengthening top-level design, enhancing marketing and regional cooperation, improving policy support, broadening investment and financing channels, cultivating professional personnel and improving service quality, and promoting the combination of ecological protection and technological innovation.

2. Development Status of Forest recreation Industry in Liaoning Province

2.1. Policy Support

The Liaoning provincial government has given policy support to the forest recreation industry. In recent years, Liaoning Provincial Forestry and Grassland Bureau attaches great importance to the development of forest recreation industry, and promotes the development of forest recreation industry in the province through policy support, demonstration base construction, broadening investment and financing channels and other measures. To expedite the development of the forest recreation industry in Liaoning Province, the Provincial Forestry Bureau has utilized the construction of forest recreation pilot units as a platform to continuously drive the establishment of forest recreation bases and enhance the infrastructure for forest recreation. For forest recreation construction projects that comply with relevant national policies, the Provincial Forestry and Grassland Administration will promptly approve and allocate forest land in accordance with laws and regulations, actively process procedures for occupying forest land, and provide guidance and service. In addition, to increase financial support, the Provincial Forestry Bureau will further strengthen collaboration with financial institutions such as Post Office Bank's Liaoning Branch and the Liaoning Agricultural Guarantee Company to provide financial loan support for forest recreation base construction projects. Furthermore, for projects meeting forestry project loan interest subsidy conditions, efforts will be made to secure central government financial subsidy support through active engagement by the Provincial Forestry Bureau.

2.2. Industrial Layout

Liaoning Province has carried out a certain layout in the forest recreation industry, and has built a number of forest recreation bases and demonstration projects. By December 2023, there are 29 national forest recreation bases in Liaoning Province, such as Huanren Fenglingu Forest Park, Daheishan Scenic Area forest recreation base, Haitangshan National Forest Park health base, etc. The specific contents are shown in Table 1 and Figure 1.

Table 1: Details of National Forest Recreation Pilot Construction Units in Liaoning Province

number	time	Name of the base pilot construction
1	2016: The first batch of national forest recreation base pilot construction units	Huanren Fenglingu Forest Park
2	June 2017: The second batch of national forest recreation base pilot construction units	Daheishan Scenic Area Forest Recreation Base
		Haitangshan National Forest Park Health Base
3	December 2017: The third batch of national forest recreation base pilot construction units	Fushun Dahuofang Experimental Forest Farm
4	December 2019: The fifth batch of national forest recreation base pilot construction units	Liaoning Shenfu New District Fengyuan Hot High Forest Recreation Base
		Liaoning Xinbin County Shenxian Valley Forest Recreation Base
		Liaoning Benxi City Huanren County Huajianzi Menghuangu Forest Recreation Base
		Liaoning Chaoyang City Miaozigou Forest Recreation Base in Longcheng District
		Qingsongling Forest Recreation Base in Xinbin County
Liaoning Benxi City Huanren County Laodingzi National Nature Reserve Forest Recreation Base		
5	November 2020: The sixth batch of national forest recreation base pilot construction units	Chaoyang city Lingyuan city Dawangzhangzi Township Forest Recreation Base Pilot Construction Township
		Liaoyang Gongchangling District Tanghe Town Forest Recreation Base Pilot Construction Town
		Dalian Pulandian District Anbo Street Forest Recreation Base Pilot Construction Street

		Dabinggou Forest Recreation Base, Nanfen District, Benxi City, Liaoning Province
		Shenxian Valley Forest Recreation Base, Xinbin Manchu Autonomous County, Fushun City, Liaoning Province
		Hongxi Valley forest Recreation Base, Gaizhou City, Yingkou, Liaoning Province
		Mopan Min Forest Recreation Base, Pulandian District, Dalian City, Liaoning Province
		Haishan Island Forest Recreation Base, Changhai County, Dalian City, Liaoning Province
6	December 2021: The seventh batch of national forest recreation base pilot construction units	Changhai County of Dalian City Liaoning Province, the Whole Area Forest Recreation Pilot Construction County
		Dalian Avenue Forest Recreation Base, Lushunkou District, Dalian City, Liaoning Province
		Daheishan Forest Recreation Base, Bei piao City, Chaoyang City, Liaoning Province
		Tianqiaogou Forest Recreation Base, Kuandian Manchu Autonomous County, Dandong, Liaoning Province
		Wutaigou Forest Recreation Base, Yixian County, Jinzhou City, Liaoning Province
7	December 2022: The eighth batch of national forest recreation base pilot construction units	Liaoning Jinzhou Linghai City Oriental Huadi City Forest Recreation Base
		Forest Recreation Base, Xinbin County, Fushun City, Liaoning Province, United National Forest Park
		Dandong City, Liaoning Province, Yuanbao District Beiguochun Forest Recreation Base
		Dandong Xinyi Resort Forest Recreation Base, Donggang City, Dandong, Liaoning Province
8	November 2023: The ninth batch of national forest recreation base pilot construction units	Liaoning Baoda Junlan Hotel Forest Recreation Base, Fengcheng City, Dandong City
		Forest Recreation Base of Bingla Mountain National Forest Park, Xifeng County, Tieling City, Liaoning Province

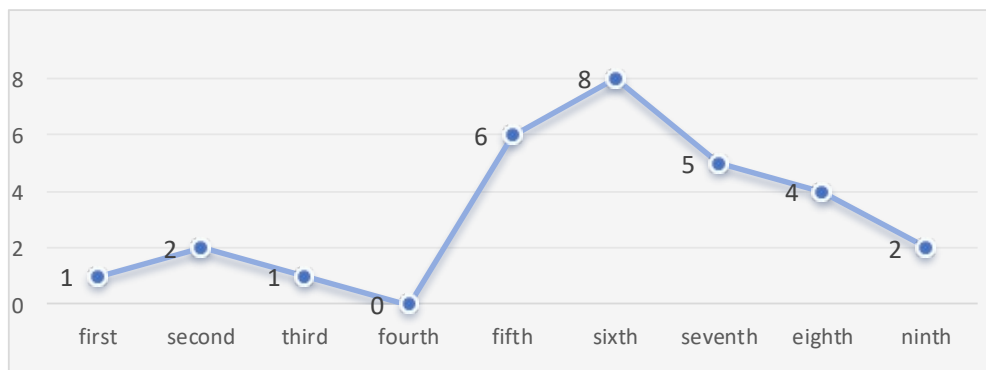


Figure 1: Trend Chart of the Number of Pilot Construction Units of National Forest Recreation Base in Liaoning Province

2.3. Market Requirement

With the improvement of people's living standards and the enhancement of health awareness, the forest recreation of the emerging health service industry is favored by more and more people as a healthy lifestyle, and the market demand is gradually growing. According to the data of the seventh National Census, the permanent resident population of Liaoning Province was 42,591 million, and the urban population was 30.726 million, with an urbanization rate of 72.14%. Among the permanent resident population of Liaoning province, the population aged 0-14 years old was 4,737,939, accounting for 11.12%; The population aged 15-59 was 26,899,001, accounting for 63.16%; The population aged 60 and above was 10,954,467, accounting for 25.72%, of which 7,417,481 were aged 65 and above, accounting for 17.42%, as shown in Table 2. The large population base provides a huge

space and market for the development of forest recreation industry. Secondly, the transportation in the province is developed, and roads, railways and shipping provide transportation convenience for tourists from outside the province or even abroad. In 2017, the number of forest leisure tourists in Liaoning Province reached 70 million, and the number of forest tourists in the province showed an increasing trend year by year, which has a broad market demand. The form of forest tourism has also been extended from the initial viewing stage to a higher level of health and resorts. Forest recreation and wellness combines tourism and leisure with health and wellness, becoming a new fashion pursued by people with broad prospects for development [2].

Table 2: The age composition of the population of Liaoning province in the 7th national population census

age	Population (people)	proportion(%)
total	42591407	100
0-14 years old	4737939	11.12
15-59 years old	26899001	63.16
the age of 60 and older	10954467	25.72
Among them: over 65 years old	7417481	17.42

3. Problems of Forest Recreation Industry in Liaoning Province

3.1. The Industrial Scale is Small and the Marketing Ability is Insufficient

The forest recreation industry in Liaoning Province is currently in the preliminary stage of exploration and development. Compared with Sichuan Province and Hunan Province, which take the lead in responding to the national call to develop the forest recreation industry, the forest recreation industry in Liaoning Province is relatively small in scale, the industrial agglomeration effect is not obvious, the market competitiveness is small, and there is a lack of large and well-known forest recreation brands and projects.

Forest recreation as a new industry, the concept of forest recreation is not popular, people do not understand the concept of forest recreation, still stay in the level of sightseeing, tourism. Some forest recreation projects lack effective strategies and means in marketing and brand building, do not carry out effective publicity, have limited visibility and influence, lack of cross-border cooperation, lack of market competitiveness, and are difficult to attract more consumers.

3.2. The Policy Support System is Not Perfect, and Investment and Financing Channels are Limited

While the provincial government has provided some policy support for the forest recreation industry, there is still room for improvement in policy implementation and effectiveness. Specific support measures and preferential policies are not sufficiently clear and comprehensive. Approval procedures are slow, and further deepening of the collective forestry rights system reform is needed. The legal framework for forestry rights transfer is incomplete, with a lagging development in the transfer market. Additionally, intermediary service institutions for transfer are not well-established, leading to non-standardized transfer procedures and management after transfer [3].

The development of forest recreation industry needs a lot of capital investment, but the investment and financing channels in Liaoning Province are relatively limited at present. The single source of funds, the lack of diversified sources of funds, the high financing threshold, the lack of professional investment institutions to correctly measure investment risks, and the willingness of social capital to enter the field of forest recreation is not strong, which affects the rapid development and scale expansion of the industry.

3.3. There is a Lack of Professionals, and the Level of Service is Uneven

The forest recreation industry needs professional management personnel, medical personnel, health consultants, etc. However, there are still shortcomings in the cultivation and introduction of talents in this field in Liaoning Province, which lacks relevant professional talents. Most of the supporting talents are related to forestry, which affects the service quality and innovation ability of the industry. The living conditions are difficult, the transportation is not convenient, and the situation is unable to retain talents.

The service quality of the forest recreation industry in Liaoning Province is uneven. The infrastructure construction of some forest recreation bases is backward, service standards are not uniform, professional medical treatment and health management are not perfect, and the exact needs of different groups for the types of forest recreation bases are not fully taken into account in the overall design, which is difficult to meet the increasingly high quality needs of consumers [4].

3.4. Ecological Environmental Protection and Industrial Development are Unbalanced

With the development of forest recreation industry, higher requirements are put forward for the protection of natural environment and ecosystem. At present, the structural, root cause and trend pressure of ecological and environmental protection in Liaoning Province will remain at a high level in general. It is faced with problems such as the difficulty of ecological restoration and the increasing pressure of forest grassland resource protection. The quality of forest resources in Liaoning Province is not high, the structure of tree species is single, and most of them are single-layer pure forests. The ecological functions of forest such as water conservation, soil and water conservation are insufficient, the coastal shelter belt and wetland ecosystems are damaged or degraded, and the natural secondary forest ecosystems need to be restored. The various construction projects in the forest recreation industry have an increasing demand for land use in forests, grasslands, and wetlands. Some irrational development and utilization activities are encroaching upon and disrupting ecological spaces, leading to issues such as unauthorized logging and deforestation, excessive reclaiming of grasslands, and illegal occupation of wetlands. The ecological compensation mechanism is still not perfect, which leads to the difficulty of ecological protection. How to protect the ecological environment while developing the industry and avoid over-exploitation and resource waste is an urgent problem to be solved [5].

4. Optimization Countermeasures for the Development of Forest Recreation Industry in Liaoning Province

4.1. Strengthen Top-level Design and Make Systematic Planning

We will hold high the great banner of socialism with Chinese characteristics, fully implement the spirit of the 19th and 20th National Congresses of the CPC, and earnestly practice the thought of ecological progress [6]. The Party Central Committee and The State Council attach great importance to the development of forest recreation industry. The development of forest recreation care is in line with the five-in-one overall layout of "economic construction, political construction, cultural construction, social construction and ecological civilization construction" proposed by the 18th National Congress of the Communist Party of China Central Committee and the concept of "green development" proposed by the Fifth Plenary Session of the 18th Central Committee of the Communist Party of China, and is an important starting point for the development of China's forestry "13th Five-Year Plan" industry [7].

Liaoning Province has unique advantages in forest resources and climate. The provincial government should combine the reality, base itself on the present and take a long-term view, fully recognize the development advantages of forest recreation industry, make top-level design planning, rely on the rich forest resources and make full use of them, formulate detailed development plans for forest recreation industry, and build a number of new forest recreation bases. Develop forest recreation project products that meet market demand, clarify development goals, key regions, project layout and schedule, ensure orderly and scientific industrial development, and achieve high-quality development of forest recreation in the new era.

4.2. Strengthen Marketing and Regional Cooperation to Build a Well-known Regional Forest Recreation Brand

First of all, it is necessary to make full use of traditional media and emerging media to popularize the relevant concepts of forest recreation to the public, so that the public has a broader understanding of forest recreation. A related concept of forest recreation is shown in Figure 2. Secondly, on the basis of conventional publicity, modern marketing means should be used to enhance the visibility and influence of forest recreation projects, establish well-known brands, create brand effects, and attract more consumers. At the same time, it can combine the unique culture and natural resources of Liaoning Province and integrate related industries such as tourism, medical care and elderly care to form a joint force for development and promote the diversification of the industrial chain. Enhance market competitiveness.

Cooperate with neighboring provinces and regions to jointly develop forest recreation tourism routes to realize resource sharing and complementary advantages. Taking Changbai Mountain Range as an example, Changbai Mountain Range is also called Changbai Mountain in a broad sense, connecting Liaoning Province, Jilin Province and Heilongjiang Province. The landform of Changbai Mountain is divided into volcanic lava landform, flowing water landform, karst landform and iceberg edge landform. Different landforms have their own characteristics and give people different experiences, and Changbai Mountain culture can link them together. The formation of regional forest recreation tourism routes in Changbai Mountain area is convenient to build regional well-known forest recreation brands.

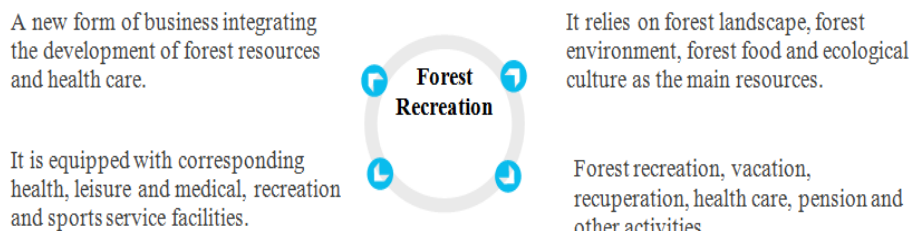


Figure 2: Related Concepts of Forest Recreation

4.3. Improve the Policy Support and Broaden the Investment and Financing Channels

It is necessary to implement the relevant policies and regulations of the Party Central Committee and The State Council on the development of forest recreation industry, the Liaoning Provincial government and relevant departments should attach importance to the development of forest recreation industry, and the policies should be appropriately tilted toward the forest recreation industry, and further clarify and improve the support policies of forest recreation industry, including financial subsidies, tax incentives, land use policies, etc., to ensure the effective implementation and implementation of the policies. The government should regulate the procedure, improve policy transparency and openness, actively do a good job of guidance and service, and build a good development environment for the forest recreation industry [8]. How national policies promote the healthy development of forest recreation industry is shown in Figure 3.

Extension departments should channel funds through the government, broaden financing channels, and attract more investment through government guidance funds, public-private partnership (PPP) models, industrial investment funds, and other means [9]. The Forestry Bureau should give more support to the development of the forest recreation industry, provide a full play to the guiding and leveraging the role of financial funds, establish a diversified and multi-channel fundraising mechanism, promote the mode of cooperation between the government and private capital, carry out in-depth cooperation with policy-based financial institutions, and improve the level of cooperation with commercial financial institutions. Relevant departments should set up professional investment institutions, reduce investment risks, attract more social capital to participate in the forest recreation industry, and improve the diversified and differentiated ecological protection compensation system in the field of forest recreation.

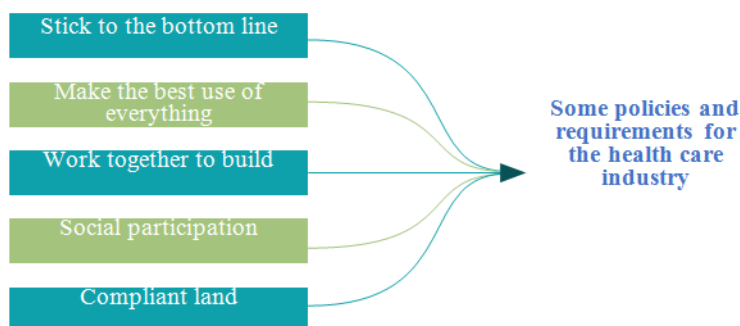


Figure 3: How National Policies Promote the Healthy Development of Forest Recreation Industry.

4.4. Cultivate Professional Talents and Improve Service Quality

At present, China's forest recreation industry has just started and lacks of professional talents.

Liaoning Province should establish a sound system of forest recreation personnel training, cooperate with colleges and vocational schools, set up related majors and courses, train talents specializing in forest recreation, improve the talent incentive mechanism, and further establish and improve the selection and appointment system for cadres to be promoted and promoted. Leaders should encourage professionals to stay in Liaoning to serve forest recreation, strive to improve working conditions and welfare benefits, fully mobilize the enthusiasm and creativity of forest recreation talents, establish a professional forest recreation research team, conduct professional and systematic training for practitioners, and introduce outstanding health management and service talents at home and abroad. We will steadily promote the training of forest recreation professionals, and effectively improve the professional ability of professionals through international cooperation, regional exchanges, and forest recreation research projects.

Relevant departments and units should increase investment in the infrastructure construction of forest recreation base, timely overhaul, maintenance and replacement of infrastructure, promote file upgrading, fully understand the market demand, provide forest recreation services needed by the public, improve service standards, and carry out targeted professional service training. In addition, professional medical and health management teams can be introduced. This will improve the professionalism and personalization of healthcare services [10].

4.5. Promote Ecological Protection and Scientific and Technological Innovation to Promote the Sustainable Development of Forest Recreation Industry

While developing the forest recreation industry, it is necessary to strictly abide by the relevant laws and regulations on ecological environmental protection, implement green development and sustainable development strategies, comprehensively strengthen the management and protection of forest and grass resources, strengthen the protection and management of forest, grassland and wetland resources, maintain biodiversity, and ensure the safety of forest resources. We have to respect nature, comply with nature, protect nature, strictly protect natural ecosystems, put ecological protection in the first place in the development of the forest recreation industry, comprehensively protect forests, grasslands, wetlands, wildlife, and other resources, carry out ecological restoration, and improve water quality in river basins. In addition, we should follow the law of succession of natural ecosystems, scientifically promote the development of forest recreation industry, strengthen operation and management, adhere to quality priority, comprehensively improve the stability of natural ecosystems and ecological service functions, improve resource utilization efficiency, and maximize the scale of economic and social benefits while promoting ecological sustainable development [11].

The use of modern scientific and technological means to improve the intelligence and information level of the forest recreation industry can not only improve the efficiency of ecological protection, but also promote the sustainable development of the industry. The department of supervision should through the use of intelligent monitoring and management systems, use of the Internet of things, big data, cloud computing, and other technologies, and the establishment of an intelligent monitoring and management system of forest recreation base. It can real-time monitoring of environmental quality, tourist flow, facility operating status, and other functions. In promoting the sustainable development of the industry, energy-saving and environmental protection technologies, such as solar energy, wind energy and other renewable energy technologies, as well as ecological building design, reduce the impact of forest recreation activities on the ecological environment, and promote ecological protection and industrial balanced development.

5. Conclusions

Through the paper and analysis of the forest recreation industry in Liaoning Province, the research focuses on its development status, existing problems and optimization countermeasures, this is a powerful supplement to the existing research on the development of forest recreation industry in Liaoning Province, expands and supplements the existing research to a certain extent, and provides necessary reference basis. This paper mainly analyzes the following status: First, Liaoning provincial government attaches great importance to the development of forest recreation industry and provides favorable policy support. Second, in terms of industrial layout, Liaoning Province has built and successfully declared 29 national forest recreation bases since 2016. Third, according to the analysis of population structure and the improvement of people's living standards and the enhancement of health awareness, it is concluded that the forest recreation industry in Liaoning Province has broad market

demand and great development potential [12]. At the same time of analyzing the current situation, the existing problems are found, which mainly include the following contents: first, the industrial scale is small and the marketing ability is insufficient; Second, the policy support system is not perfect, limited investment and financing channels; Third, the lack of professional personnel, the level of service is uneven; Fourth, imbalance between ecological and environmental protection and industrial development. The following measures can be taken to promote the sustainable development of forest recreation industry in Liaoning Province: first, strengthen top-level design and make systematic planning; Second, strengthen marketing and regional cooperation to build regional well-known forest recreation brands; Third, improve policy support and expand investment and financing channels; Fourth, cultivate professional talents and improve service quality; Fifth, promote ecological protection and scientific and technological innovation to jointly promote the sustainable development of forest recreation industry.

Based on the analysis of the current situation, this paper raises questions and gives corresponding optimization countermeasures and suggestions, further enriching and improving the existing relevant research. Of course, there are also some imperfections in this study. Due to the lack of relevant research literature and the difficulty of obtaining relevant specific information, we can only analyze existing information and data, resulting in incomplete information and insufficient research depth, and some biases in the analysis. In the future, it is necessary to have more authoritative and comprehensive information and data to support more in-depth research and analysis to ensure that the analyzed and proposed content is more accurate, objective and reasonable.

Acknowledgement

Liaoning Federation of Social Sciences, Liaoning Province Economic and Social Development Research Project in 2023 (2023lslybkt-068): Value Implications and Implementation Path for Promoting Rural Revitalization in Liaoning Forest Recreation Industry.

References

- [1] Central Government of the People's Republic of China. Office of the National Forestry and Grassland Administration General Office of the Ministry of Civil Affairs General Office of the National Health Commission Office of the State Administration of Traditional Chinese Medicine on the construction of the National Forest Health Base: No. 121[EB/OL].(2019-07-15)[2024-07-10].
- [2] Zhang Yadong. Thinking on the development of forest health industry in Liaoning Province [J].Forestry survey and design in Inner Mongolia, 2020, 43(05):63-64+76.
- [3] Liaoning Provincial People's Government. Notice of the General Office of the People's Government of Liaoning Province on Issuing the "14th Five-Year Plan" Forestry and Grassland Development Plan of Liaoning Province: Liao Political Office issued No.4(2022)[EB/OL] (2022-01-14)[2024-07-10].
- [4] Wu Wenhao. Analysis on forest health industry in Liaoning Province[J].Shelterbelt technology, 2019,(01):88-89.
- [5] Ding Rui. Research on Function Positioning and Evaluation of Tourism Real Estate[D].Xi'an University of Architecture and Technology, 2009.
- [6] None. Quarterly chronicle and documentation [J]. The China Quarterly, 2008, 196960-991.
- [7] Liu Fujiang, Liu Lin, Feng Jian, et al. Thinking on developing forest health industry in Liaoning Province[J].Liaoning Forestry Science and Technology,2016,(05):63-66.
- [8] Zhang Yeqing. Strengthen the construction of agricultural economy system and give full play to its functional role[J].Jiangxi Agricultural Economy,2001,(05):64.
- [9] Xie Yifan, Qin Guangyuan. Analysis on the characteristics of financial literacy of forestry entrepreneurs: Based on the survey of 77 forest health bases [J].Rural finance research, 2021, (07): 63-69.
- [10] Li Cheng. Analysis of consumption demand for forest health care in Changsha City based on demographic characteristics [D].Hunan University, 2019.
- [11] Chu Xiangyu. Research on high-quality transformation and development strategies of resource-depleted areas in Shiguai District, Baotou City [D].Inner Mongolia University, 2020.
- [12] Ming L. Study on HSE Management of Our Construction Enterprise [J].Advanced Materials Research, 2010, 970(121-122):733-738.