

# Study on the Current Situation of Digital Development of Forest Recreation Industry and Countermeasures

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**Abstract:** The scientific connotation of forest health highlights the principles of people-centred, forest-based, restoration-focused and health-oriented. In recent years, with the aggravation of population aging and the promotion of “Healthy China” strategy, forest health industry is booming. Starting from the perspective of the significance of forest recreation, this paper compiles and integrates the current situation of forest health, and analyses in depth that forest health industry can promote the development of low-carbon economy and become an important breakthrough in natural health and wellness, a cultural carrier for the construction of ecological civilization, and an important way of rural revitalization, and that the use of digitalization will definitely enhance the effect and experience of forest recreation. The current situation of digital development of forest recreation industry is described, digital transformation has become the inevitable trend of upgrading the forest recreation tourism industry system, and digital transformation is also the key to the transformation and upgrading of China’s economy, as well as the road to high-quality development of the tourism industry. On this basis, the countermeasures research to promote the digital development of forest recreation industry is proposed, which needs to formulate scientific development planning, strengthen management guidance, enhance marketing promotion, actively popularise the new lifestyle of forest recreation, establish forest recreation digital industry demonstration zones, drive the development of the regional economy, as well as increase the training of forest recreationists, optimise the allocation of forest recreation resources and other suggestions for the digital further development.

**Keywords:** Forest recreation; Digital transformation; Coordinated development

## 1. Introduction

The forest health industry refers to a new type of health industry based on health management, including the cultivation of high-quality forest health environments, forest healing, old-age health care, rehabilitation, recreation and forest experience, and the research, development and production of forest health products.<sup>[1]</sup> Forest health emphasises a very consistent philosophy of natural health, disease prevention and integrated health. The promotion of health concepts and the development of the forest health industry will go hand in hand.

"Health Rehabilitation and Recreation in Forests (HRRF)"The term evolved from the term "forest bathing", and the concept of forest therapy was developed by the Germans in the early 1840s when they established the world's first forest bathing site. Subsequently, countries such as the United States, Australia, and South Korea have also conducted theoretical research on forest therapy in line with their own national conditions. China introduced it in the 1980s and called it "Health Rehabilitation and Recreation in Forests (HRRF)".<sup>[2]</sup> Forest recreation industry as an important part of the recreation industry, China attaches great importance to the development of forest recreation industry, and introduced a series of initiatives to vigorously promote the development of forest recreation industry. For example, the 13th Five-Year Plan for the Development of the Forestry Industry (Zhang Yang, Lin Nan, 2019).<sup>[3]</sup> While absorbing international research results, our scholars have gradually paid attention to research on forest tourism, development proposals, industrial development, and healing factors. Especially with the increase in chronic diseases associated with the stresses of daily life, it is becoming increasingly important for most people living in cities to establish and implement long-term care programmes to promote health<sup>[4]</sup>. In 2013, the concept and technology of forest healing was fully introduced for the first time in Badaling, Beijing (Geng Li, Yongdan Huang, Longsheng, 2020)<sup>[5]</sup>. Starting from the influencing factors of forest health tourism, Li Jiren and Xu Dong constructed a forest health tourism evaluation index system using hierarchical analysis<sup>[6]</sup>. Cong Li and Zhang Yujun put forward the proposal of forest tourism to the development of forest recreation tourism, and at the same time, strengthen the research of forest recreation tourism policies and regulations, and build the index system of forest recreation tourism base<sup>[7]</sup>. In recent years, with the spread of the concept of green health, people pay more and more attention to health, more enthusiastic about forest health tourism, it makes the forest sports health tourism has grown significantly, recreation industry has become a basic requirement for people to enjoy a

healthy life. The current digital transformation is the key to the transformation and upgrading of China's economy, and it is also the road to the high-quality development of the tourism industry. Digital transformation has become an inevitable trend in the upgrading of the forest recreation tourism industry system, the development of digital development in the forest recreation industry has a certain degree of universality, but not enough in-depth development to promote the healthy and sustainable development of health tourism, sustainable development is to promote the development of economically backward areas without destroying the premise of natural resources<sup>[8]</sup>. There is a need to reconcile forest resources with the growing demand for health tourism. The current development of digitalisation in the forest recreation industry is plagued by problems such as insufficient application of technology, poor data sharing, lack of talent, imperfect regulation and insufficient user awareness. Solving these problems requires the joint efforts of all parties in the industry to strengthen technological innovation, information sharing, talent cultivation and reasonable regulation to enhance the level of digital development. In this context, it is urgent and important to promote the flourishing development of digitalisation of forest recreation industry. Therefore, this paper starts from the current situation of forest recreation, on the basis of analysing the significance of the forest recreation industry, analyses the countermeasures to promote the digital development of the forest recreation industry, and puts forward the solution ideas and methods in a targeted way, so as to achieve the progress of promoting the development of the forest recreation industry.

## 2. The Importance of Developing Digital Forest Recreation Industry

### 2.1 Forest recreation will surely become an important way to develop a low-carbon economy

The concept of low carbon permeates all aspects of the economy, culture and life, and forest recreation can contribute to the realisation of a low carbon economy and sustainable development through the carbon sink effect, energy saving and emission reduction, eco-tourism, renewable energy and green industry. The key is to increase research, development and dissemination of energy-saving and environmentally friendly technologies and low-carbon energy technologies, and to work together to promote forest restoration and growth as a means of increasing carbon stocks, reducing emissions and mitigating climate change. Forest recreation tourism can provide opportunities for contact with the natural environment, offering the experience of harmonious coexistence between human beings and nature without destroying nature. This form of tourism not only helps to improve people's physical and mental health, but also attracts tourists and promotes the development of the local economy while protecting the ecological environment. Forest tourism has become an important pillar of the tertiary sector<sup>[9]</sup>. The forest recreation industry, as a service model, needs to integrate related industries, including forestry, construction, medical care, and hospitality services, to operate together in order to develop into a mature forest recreation industry operation model, which can better provide consumers with recreation services (Pan YangLiu, Xu Jun, Hu Saochang, et al, 2019)<sup>[10]</sup>. In recent years, there has been a year-on-year increase in the number of forest health resorts planned or constructed across the country, but projects related to health resorts have gradually diversified to include hotels, tea culture, hot springs, mineral water, forest art, recreation, and other industrial forms and supporting facilities. The digital development of China's forest recreation industry has been rapid, becoming a hot topic in many fields such as tourism, medical care and sports, attracting a lot of investment and vision.

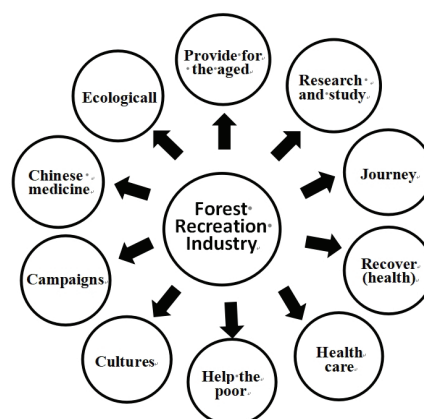


Figure 1. Forest Recreation Industry Cluster Map.

### 2.2 Forest recreation will definitely become an important breakthrough in natural health and wellness

Urban forests have become an important place of leisure and recreation for urban residents because of their multiple ecological health care functions. People are paying more and more attention to the environmental health factors of forest health. Since ancient times, China has had philosophical theories about the relationship between man and nature. The use of plants and nature by people as a means of medical treat-

ment to promote their mental and physical health has been emphasised. The pre-Qin Taoist culture is one of the essences of traditional Chinese culture, containing ecological wisdom on the relationship between human health and nature<sup>[11]</sup>. Forest therapy is gradually gaining momentum as public awareness of health issues and the importance of the ecological functions of forests increases. Forest therapy has been applied worldwide as a preventive and alternative therapy for human health. As a safe, side-effect-free, low-cost, preventive and alternative therapy, forest therapy has been scientifically proven to promote human physical and mental health. Forest health values have become an integral part of the valuation of forest ecological values and services. Represented by countries such as Germany, Canada, the United States, Australia, Japan, the Republic of Korea, Finland, New Zealand, Thailand and Cambodia, forest therapy has a long history of development worldwide. They have actively explored and researched forest therapies based on forest resources and cultural characteristics. Foreign research on forest healing has mainly focused on empirical studies of the health effects of forest healing. Through the collection of empirical and relevant data, those forests with high-quality resources will be built into forest healing bases, and the bases will be certified. At the same time, relevant laws and regulations will be formulated to promote the development of the forest healing industry. Forest bathing trips can increase the activity of NK cells, which releases more anti-cancer proteins, suggesting that forest bathing trips have a preventive effect on the occurrence and spread of cancer<sup>[12]</sup>. Wang Fuguo et al. also conducted a number of empirical studies on forest bathing and found that forest bathing can alleviate the symptoms of hypertension in the elderly in some aspects and has a good effect on the health of elderly patients with chronic obstructive pulmonary disease (COPD)<sup>[13]</sup>.

### **2.3 Forest recreation will definitely become a cultural carrier for the construction of ecological civilisation**

The construction of an ecological civilisation is a fundamental plan for the sustainable development of the Chinese nation (Xi Jinping, 2019)<sup>[14]</sup>. Forest landscape resources include not only plant and animal resources, but also ecological and cultural resources<sup>[15]</sup>. As a cultural carrier, forest recreation can promote the protection of the natural environment and the spread of the concept of green development. Forest recreation culture can help people regain their reverence and care for nature and enhance their sense of responsibility for the ecological environment, thereby promoting the sustainable development of society and the construction of an ecological civilisation. Digging deeper into the cultural connotation of green ecological products, grasping the development of ecological culture, promoting the integrated development of culture and tourism, fostering a number of ecological and cultural products with ecological and cultural values and characteristics, and developing ecological and cultural industries. Flexible use of rich forests, wetlands and other natural resources, as well as a full understanding of local history and humanities resources, the construction of high-quality green ecological base, accelerate the construction of ecological cultural communication system, tell a good story of harmonious coexistence between man and nature. Forest recreation, as a cultural carrier, not only promotes people's physical and mental health, but also promotes the construction of ecological civilisation and sustainable development. It is a unique form of culture that integrates nature and humanity, and will drive people's cultural concepts and behaviour in the direction of greater health, environmental protection and sustainability.

### **2.4 Forest recreation will definitely become a development pathway for rural revitalisation**

The forest recreation industry is an emerging Chaomingyang industry, involving tourism, culture, education, health care and many other industry sectors, and is an important initiative to build a beautiful countryside and implement the Healthy China Initiative in the context of the construction of an ecological civilisation (Li Guohui, Wang Xin, 2022)<sup>[16]</sup>. The ecological environment is the basis for human survival and health. People should be put in the strategic positioning of the priority position of development, vigorously develop the health industry, accelerate the development of health industry and the construction of a healthy China. By sorting out and integrating the current situation of forest health, it is found that the development of forest health industry can activate the economic vitality of the countryside and help mountain farmers to get rid of poverty and become rich. Construction of recreation base has a good ecological environment is a necessary condition, people need to consciously improve the maintenance of the ecological environment of the action force, sustainability of the inclusive forest health industry, can promote rural economic growth, improve farmers' income, improve the quality of life of farmers, and promote the prosperity of rural industry. The civilisation of the countryside and the affluence of life have also changed with the rise of the recreation industry.

### **2.5 The use of digitalisation will definitely enhance the effectiveness and experience of forest recreation**

By applying Virtual Reality (VR) and Augmented Reality (AR) technologies, people can enjoy the beauty and calmness of nature through recreational activities in a virtual forest environment. In addition, through smart wearable devices and sensors, human physiological indicators can be monitored and recorded, helping individuals to better understand their own physical conditions, so that they can target their recreational activities. Using big data analysis and artificial intelligence technology, forest recreation resources can be scientifically planned and managed to improve resource utilisation efficiency and environmental protection. Meanwhile, through the e-commerce platform and mobile payment system, convenient booking and payment services can be provided to facilitate the experience and participation of tourists and

recreationists. Through the internet platform and social media, the concept and value of forest recreation can be shared and publicised, attracting more people's attention and participation. In addition, digital technology can also enable people to access information and guidance on forest recreation through the Internet and mobile applications for remote recreation and education without the need for on-site visits. Overall, the development of the forest recreation digital industry helps to enhance the effectiveness and experience of forest recreation, improve management and operational efficiency, as well as promote and disseminate the concept and value of forest recreation. The digital industry brings new opportunities and challenges to the forest recreation industry, as well as providing people with more choices and convenience, and promoting sustainable development and good lifestyles.

### **3. Status and trends in the digital development of the forest recreation industry**

The forest recreation digital industry refers to the use of digital technology and information technology to promote and develop the forest recreation industry. Forest recreation is a way of using the natural environment, forest resources and ecosystem services to provide health recreation, psychological relief and physical and mental balance. Promoting sustainable use of resources on the basis of forest protection and cultural heritage (Zhuang Weijie, Li Hui, Shen Qianqian, 2022)<sup>[17]</sup>. The development of the digital industry can bring many opportunities and benefits to forest recreation. At present, the digital development of forest recreation in China is in a favourable development environment, but development bottlenecks are gradually emerging, there is over-exploitation of forest resources (Pan Yang Liu, Xu Jun, Hu Shaochang, et al., 2019)<sup>[18]</sup>. Base development stays at the level of forest tourism (Han Lihong, Tian guoshuang, Gao huan, 2021)<sup>[19]</sup>, insufficient product system design (Han Lihong, Tian guoshuang, Gao huan, 2021)<sup>[19]</sup>, and limited public recognition of forest recreation.

#### **3.1 Strengthening the supply of health technologies and laying the foundation for the digital transformation of the forest recreation industry**

The strong support of national policies, the active assistance of forest health tourism enterprises around the world, the support and pursuit of tourism consumers, and especially the infiltration of the elements of Internet technology have promoted the rapid development of the forest health tourism industry, and also laid an excellent foundation for the digital transformation of the forest health tourism industry, which has resulted in the formation of a good ecological pattern of politics, economy and consumption. The development of the forest recreation digital industry and the strengthening of the supply of health technology go hand in hand. By strengthening the supply of health technology and combining it with the development of the digital industry, the forest recreation industry can better meet the needs of users, provide better services and experiences, and further promote the development of the health industry. The supply of health technology has been strengthened, and various innovations continue to emerge: the rapid development of the industrialisation of health Internet of Things (IoT), artificial intelligence, medical treatment and other technologies, and the increasingly close cross-border integration of information technology with pensions, tourism, healthcare and so on, have provided a new impetus for the development of the health industry<sup>[20]</sup>. As the demand for health grows, so does the interest in digitising the forest recreation industry.

#### **3.2 Rapid development of digitalisation in the forest recreation industry and gradual improvement of digital services**

Many forest recreation apps have been launched, through which people can access forest recreation information and resources, including forest maps, recreation activity guides, health data tracking, etc.; some internet platforms have provided sales and booking of forest recreation products and services, making it easier for people to access recreation experiences and services; advances in sensor technology have made it easier to monitor the forest environment and individual. Advances in sensor technology have made monitoring of the forest environment and individual recuperation status more accurate and convenient. Through sensors, data on the forest environment can be collected and analysed, as well as individual recreation data, to provide a scientific basis for forest recreation; in general, people see forest tourism as an opportunity to get closer to nature, with a greater focus on the visual experience<sup>[21]</sup>. Virtual reality technology can provide an immersive forest experience, so that people who are unable to visit the natural environment can also get the benefits of forest recreation; through the analysis of forest recreation data and the application of artificial intelligence, it is possible to understand the effects of recreation and individual needs, and provide support for the development and personalisation of recreation programmes; through social media and network sharing, people can share their forest recreation experiences with others, thereby increasing. Through social media and network sharing, people can share their forest recreation experience with others, thereby increasing social interaction and awareness of forest recreation.

#### **3.3 Digital transformation has become an inevitable trend in upgrading the forest recreation tourism industry system**

Digital transformation is the key to the transformation and upgrading of China's economy, and it is also the road to the high-quality development of the tourism industry. The use of digitalisation in the current forest recreation industry has already had a certain degree of universality, but it has not been developed in depth enough. The use of digitalisation in the forest recreation industry can promote the improvement of service and management, improve the user experience, and at the same time contribute to environmental protection and industrial develop-

ment. As technology continues to be innovated and applied, digitalisation will play an increasingly important role in the forest recreation industry. Digital technologies can provide a better user experience. Virtual Reality (VR) and Augmented Reality (AR) technologies can provide visitors with an immersive experience of the benefits of the forest's wonderful wellness. At the same time, digitalisation can be used to provide personalised health and rehabilitation plans, with health guidance and wellness programmes tailored to the user's needs and physical condition. Digital technology can also be used to monitor and protect the forest environment. Technologies such as sensors and drones make it possible to monitor in real time the ecological parameters of forests, including air quality, soil moisture and temperature, as well as the migration and distribution of wildlife. The collection and analysis of these data can help protect forest ecosystems and improve sustainable use and management. Digitalisation can also promote innovation and development of the forest recreation industry. Through technologies such as big data and artificial intelligence, in-depth analysis of market demand and user behaviour can be achieved, providing companies with accurate market forecasts and decision-making support. At the same time, the promotion of digital platforms and social media can increase the exposure and popularity of the industry and attract more users and investment. Forest health tourism is a new form of tourism industry and an effective exploration of the new form of forest resources. As a new form of tourism industry, forest health tourism has developed rapidly in recent years.

## **4. Recommendations for promoting the digital and dynamic development of the forest recreation industry**

### **4.1 Follow the concept of sustainable development and promote digital transformation and upgrading**

The development of the forest recreation industry, from the point of view of development momentum, is aimed at achieving sustainable development, meeting the needs of the present generation for healthy living, leisure and recreation, while paying attention to the environmental interests of future generations, on the basis of adequate protection of ecological resources (Cao Jingshi, Wu Haiquan, 2020)<sup>[22]</sup>. The relationship between human beings and nature should be reasonably coordinated, following the concept of sustainable development, which means the coordinated development of economy, society, resources and environmental protection. Adhere to the priority of protection, rational use, follow the "original, natural, harmonious" approach, integrated planning, integrated development, the formation of an excellent environment, the scale of moderate, distinctive forest recreation digital industry. Digital transformation of the forest health tourism industry refers to the use of cloud computing, big data, artificial intelligence and other technologies to comprehensively reshape strategic thinking, business processes, organisational structure and business models, construct a data-centric value system, build a new industrial form, and realise the comprehensive upgrading of the company's business model, operation and management, service processes and technology application and value creation. Make full use of 5G, ultra-high-definition, augmented reality, virtual reality, artificial intelligence and other technologies to develop and build a new generation of immersive and experiential forest recreation culture and tourism consumption content. Encourage digital cultural enterprises to give full play to their platform and technical advantages, create and disseminate digital cultural products that show the characteristic culture, folk skills, local customs, rural scenery, production and life of the forest recuperation industry, and plan and develop offline immersive experience projects, so as to drive the dissemination, display and consumption of forest recuperation culture.

### **4.2 Formulate scientific development plans and strengthen management guidance**

When planning a local forest health industry, it is necessary to analyse the local industrial structure, analyse the current state of the industry, combine the resource situation and policies, find the core of the industry and the driving force of the industry, and finally explore the sustainable development of the forest health industry. The development of forest health conservation business is a reflection of the balance between economic and ecological benefits<sup>[23]</sup>. It is necessary to include the promotion of the development of the forest recreation digital industry in the local economic and social development planning, strengthen communication and cooperation with the relevant departments, establish a mechanism for co-operation and consultation, study and plan out specific measures to support the forest health industry, and work together to promote the rapid and healthy development of the forest recreation digital industry. Forest recreation industry land use planning can be combined with network economy, military culture, and folk culture resources to seek development in integrating health resort, agricultural leisure, parent-child study, and mountain sports in mountainous countryside recreation towns, as well as promoting the development of leisure agriculture and rural tourism. According to the differences in villages, the establishment of different characteristic projects, strengthening urban and rural connectivity, relying on rich natural resources, and vigorously developing the promotion of tourism innovation characteristics of culture.

### **4.3 Strengthen marketing and promotion, and actively popularise the new lifestyle of forest recreation**

Promote digital marketing, through online promotion, social media, search engine optimisation and other means, to comprehensively display and promote the advantages and characteristics of the forest recreation industry. At the same time, online activities and online training are carried out to attract more users to participate and understand the value of forest recreation and improve the visibility and influence of the forest recreation industry. The Internet celebrity economy refers to a new economic model that relies on the Internet, especially the mobile

Internet communication and its social platform promotion, forms a huge fan and targeted marketing market through a large number of social concerns, and derivatives various consumer markets around the Internet celebrity, and ultimately forms a complete Internet celebrity industry chain<sup>[24]</sup>. Self-media communication with forest health as the content carrier lays the Internet celebrity economy, according to Maslow's need theory, people have social needs, respect needs, self-actualisation needs, etc., which makes the self-media has a huge space for development. We strive to achieve zero-cost marketing, promote industrial dissemination, popularise and promote the concept and knowledge of forest health. At present, the forest recreation industry has become an important part of tourism development. There is an increasing demand for diversification of tourism experience, characteristics and consumption levels. Therefore, in the face of the audience, it is necessary to achieve personalised and differentiated innovation of the experience content, to form an online celebrity brand, so that the public can really understand the forest recreation, and actively guide the consumption trend, so that the forest recreation can become the new normal of the public's life.

#### **4.4 Establishment of a digital industrial demonstration zone for forest recreation to drive regional economic development**

Establishing national forest health conservation demonstration sites to provide constructive assistance in building a scientific and perfect forest health conservation industry system; at the same time, the Government should give full play to its guiding role in promoting the development of the local forest health industry through the formulation of supportive policies and the improvement of supporting measures<sup>[25]</sup>. And there is a long way to go to vigorously develop the forest health conservation industry. The establishment of the Forest Health Care Digital Industry Demonstration Zone will have a multifaceted and favourable impact on society and the economy. The Forest Health Care Digital Industry Demonstration Zone will attract investment and enterprises to the area, thus driving local economic development. Digital industries, including digital tourism, health management and e-commerce, will bring new jobs and economic growth to the area. The Forest Recreation Digital Industry Demonstration Zone will pay more attention to ecological protection, monitor and manage the health of forest resources through digital technology, and promote sustainable development. Digital technology can also improve resource utilisation efficiency and reduce environmental pollution and energy waste. The establishment of the demonstration zone can promote scientific and technological innovation and talent training, and become an important base for scientific and technological innovation and talent training. Various science and technology enterprises and R&D institutions will gather in the area to promote the R&D and application of innovative technologies. In short, the establishment of a forest recreation digital industry demonstration zone will bring about favourable impacts on the local economy, tourism growth, ecological protection, health management and scientific and technological innovation in various aspects. This will provide people with better lifestyles and job opportunities, while also promoting sustainable social development.

#### **4.5 Increase the training of forest recreationists and optimise the allocation of forest recreation resources**

Forest health hygienist refers to the service personnel engaged in forest health program design, environmental assessment and site selection, health service, effect assessment, guidance and consultation, and is a professional health care personnel focusing on the use of forest resources in the natural environment to promote people's physical and mental health and happiness. By engaging participants in a variety of activities that interact with nature, they help people relax, reduce stress, improve mental health, and strengthen their connection to nature. As a new profession, forest health teacher helps to promote the development of forest health care. Forest health teacher builds a bridge, transforms forest resources into "health and welfare", provides a strong talent guarantee for the development of forest health care, better regulates the order of forest health care market, and promotes the healthy and orderly development of forest health care industry. It is helpful to standardize the behavior of forest health industry practitioners, enhance their professional identity, sense of responsibility, sense of mission, strengthen ideological and moral construction, and facilitate the construction of forest health industry.

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## **References**

- [1] Si-si LIU, Zhong-quan QIAO, Tian-wei JIN, et al. Current Situation and Prospect of Forest Health and Conservation Science Research [J]. *World Forestry Research*, 2018, Vol. 31, No.5:26-32
- [2] ZHU M., ZHU J., AI X.R., GUO Q.J., YAO L. Research Progress and Industrial Development Status of Forest Rehabilitation. *Hubei Forestry Science and Technology*, 49(05), 53, 2020.
- [3] Zhang Yang, Lin Nan, Wu Chengliang. Analysis of supply and demand prospects of forest recreation industry in China [J]. *Journal of Central South Forestry University of Science and Technology (Social Science Edition)*, 2019, 13(01):89-95.
- [4] Chae, Y.-R.; Kang, S.-Y.; Jo, Y.-M.; Lee, S.-H.; Park, S.-Y.; Cheon, I.-S. An Analysis of Needs and Preferences of Forest Healing Programs in patients with Chronic Diseases. *J. Korean Soc. Rural. Plan.* 2021, 27, 29–41.

- [5] Li Geng, Huang Yongdan, Longsheng Tourism + Poverty Alleviation, Landscape into "Money View" N. Guangxi Daily, 2020-01-01.
- [6] LI J.R., XU D. Study on the Construction of Forest Health Tourism Evaluation Index System. *Forestry Economics*, 40(03), 28, 2018.
- [7] CONG L., ZHANG Y.J. Thoughts on the Scientific Research of Forest Health Tourism. *Tourism Tribune*, 31(11), 6, 2016.
- [8] Kaur, P.; Parashar, A. A Systematic Literature Review of Blockchain Technology for Smart Villages. *Arch. Comput. Methods Eng.* 2022, 29, 2417–2468.
- [9] Cai, W. Depending on forest tourism to realize the development of forest eco-products. *J. Hebei For. Sci. Technol.* 2018, 4, 59–61. (In Chinese)
- [10] Pan Yangliu, Xu Jun, Hu Shaochang, et al. Research on the construction strategy of forest recreation base based on SW OT and AHP analyses: taking Jiangxi Lushan National Nature Reserve as an example [J]. *Forestry Economy*, 2019(3):40-444, 59.
- [11] Han, Y. Ecological philosophy and modern value in Taoist Culture of Pre-Qin Dynasty. *J. Qiqihar Univ. (Phi.Soc. Sci.)* 2019, 5, 47–49.
- [12] KAWADA T., LI Q., ITOH-NAKADAI A., INAGAKIH., KATSUMATA M., SHIMIZU T., SUZUKI H. Effect of forest bathing on sleep and physical activity. *Forest Medicine*, 105, 2013.
- [13] WANG G.F. Medical experiments in forest bathing. *Forest & Humankind*, (09), 182. 2015
- [14] Xi Jinping. Pushing China's ecological civilisation construction to a new level [J]. *Seeking truth*, 2019(3):1-10.
- [15] Xie, C. On rational strategies for sustainable development of forest tourism in china. *J. Chang. Univ.* 2019, 33, 64–66. (In Chinese)
- [16] LI Guohui, Wang Xin. Research on countermeasures for the development of forest recreation industry under the perspective of beautiful countryside construction [J]. *Agricultural Economy*, 2022(1):688-69.
- [17] Zhuang Weijie, LI Hui, Shen Qianqian. Utilisation of forest healing resources and product development in Japan [J]. *World Forestry Research*, 2022, 35(1):106-1112.
- [18] PAN Yangliu, XU Jun, HU Shaochang, et al. Research on the construction strategy of forest recreation base based on SWOT and AHP analysis: taking Jiangxi Lushan National Nature Reserve as an example [J]. *Forestry Ji*, 2019, 41(3):40-44, 59.
- [19] Han Lihong, Tian Guoshuang, Gao Huan. Impact of industrial integration on the development of forest recreation industry [J]. *Journal of Northeast Forestry University*, 2021, 49( 8):100-105.
- [20] Xue-ling GUAN. An Analysis of the Driving Force of Health Industry Development under the Background of "Healthy China" [J]. *China Health Economy*, 2019, Vol. 38, No. 7:67-70
- [21] Xie, C. On rational strategies for sustainable development of forest tourism in china. *J. Chang. Univ.* 2019, 33, 64–66.
- [22] Cao Jingshi, Wu Haiquan. Forest recreation under the perspective of social symbiosis [J]. *Forestry Economy*, 2020, 42(9):43-52.
- [23] Ke-fu WEI. Analysis of Practical Measures for Developing Forest Health Industry [J]. *Agriculture and Technology*, 2019, Vol. 39, No. 14:82-82
- [24] Hongwei Li, Xiaoyu Li, Ziqi Wang, sentence Xin. A study on the influence of online marketing and suggestions [J]. *Business news*, 2019 (36): 7-8
- [25] Xiao-ming SUN, yi CHEN. Countermeasures and suggestions for the development of forest health industry [J]. *Modern Horticulture*, 2019, No.22:15-16