

A Case Study on Planning and Design of Hot Spring Tourism Resources: Taking Nanjing Tangshan Hot Spring Resort as an Example

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Abstract

Tangshan, Nanjing, is famous for its hot springs. The rise of hot spring tourism this year has brought opportunities to Tangshan. This paper takes Tangshan Hot Spring Resort in Nanjing as an example to analyze the planning and design of hot spring tourism resources. Through the analysis and sorting of the local natural and cultural conditions and the classification of hot springs, understand the concept and principles of local tourism planning, and focus on the analysis of Tangshan Hot Spring Health Care Town, a key tourism planning project. This paper proposes that local development may be affected by traditional tourism development models, and over development, homogeneity of tourism products and other issues may restrict local tourism development, and puts forward suggestions and countermeasures for the above issues.

Keywords

Tangshan Nanjing, Tourism resources,.....

With the continuous development and improvement of China's economic situation and national income, the continuous improvement of national tourism demand is positively promoting the diversified development of the tourism market. China's hot spring tourism industry is developing quite rapidly.

China's hot spring resources are abundant, according to the Xinhua News Agency in 2008, China's address department has proved that there are more than 3,700 hot springs, in the geographical demon distribution in Beijing, Shandong, Yunnan, Sichuan and other provinces and cities, in the hot spring resources less distribution in East China, such as: Nanjing, Shanghai and other places also have a lot of hot spring resources for tourism, energy development. [1]

China has a long history of hot spring use and tourism, and there are quite a lot of records and related folk legends about the use of hot springs and tourism in historical materials. The record of hot springs appeared in the ancient book "Classic of Mountains and Seas" as early as the pre-Qin period; In the Northern Wei Dynasty, Li Daoyuan's "Notes on the Book of Water" recorded 40 hot springs, such as: "Darong Mountain produces warm soup to cure all kinds of diseases."

; The Song Dynasty's Taiping Yulan records hot springs that were discovered before the Tang Dynasty. [2] Regarding the use of hot springs and tourism, Qin Shi Huang built "Lishan Soup" in Lishan more than 2,000 years ago, and the rulers of the Later Han, Sui and Tang dynasties all attached great importance to Lishan Soup, and it was expanded and named "Huaqing Pond" during the reign of Xuanzong of Tang Dynasty. In the history of our country, there have been famous hot spring tourist resorts such as "Eight Hot Springs", and these hot spring resources are mostly used as tourist activities for princes and nobles to bathe and cure diseases.

China's modern large-scale development and utilization of hot spring tourism resources has gone through the following four stages: the first stage, after the founding of New China, the establishment of hot spring workers' sanatorium, the function is relatively single, mainly using

the hot springs of the recuperation function, at this time the hot springs do not have the tourism function; In the second stage, with the reform and development, the people's demand for leisure tourism has gradually increased, and the tourism function has been initially integrated into the development of hot springs; In the third stage, since the 90s of the 20th century, with the transformation of China's tourism industry from sightseeing tourism to leisure tourism, large-scale comprehensive hot spring tourism resorts with more complete functions and leisure and entertainment have gradually emerged; In the fourth stage, from the 21st century onwards, hot spring tourism is mainly based on health vacations, combining tourism, leisure vacation, and fitness and recuperation. [3]

1. Introduction to Nanjing Tangshan Hot Spring Resort

1.1. The natural resources of Nanjing Tangshan Hot Spring Resort

Nanjing Tangshan Hot Spring Resort is located at the northeast end of Jiangning District, Nanjing City, Jiangsu Province, about 20 kilometers away from the main urban area of Nanjing, and connects with Jurong City, Jiangsu Province to the east. The resort covers an area of about 170 square kilometers, with more than 100,000 acres of mountains and a regional green coverage rate of more than 40%.

The area has abundant rainfall, abundant water resources, well-developed surface water system and good water quality. Mineral resources are abundant, and about 40 kinds of minerals have been discovered; At the same time, there are more than 1,000 species of forest wild plants, woody plants, medicinal plants and animals in the area, of which 8 species of plants are listed as rare and endangered plants under national key protection, and more than 30 species of animals are listed as national key protected wild animals. [4]

1.2. The human resources of Nanjing Tangshan Hot Spring Resort

Tangshan is rich in cultural resources, in addition to hot spring tourism resources, it also has cultural tourism resources in many historical periods: about 600,000 years ago "Nanjing Ape Man", Ming Dynasty relics Tangshan mine and the Guinness World Record of the Ming Dynasty Yangshan stele, the former residence of the Republic of China celebrities, the Republic of China bunkers and the ancient bridges of various dynasties. With the continuous deepening of tourism development, the development of tourism resources in Tangshan will gradually rise to the development of local natural and cultural tourism resources, but at present, hot spring resort products still occupy an absolute advantage. [5]

1.3. Type of hot spring resource

As a kind of geothermal resources, hot springs belong to low-temperature geothermal resources according to the national standard "Code for Low-quality Exploration of Geothermal Resources" (GB11615-89), and hot spring resources can be divided into three categories according to water temperature: hot water, warm hot water and warm water, as shown in Table 1.1. For the development of hot spring tourism resources, the temperature of spring water has a high degree of influence on the comfort of the human body, scholars usually use 37 °C and 42 °C as two important graduation values to distinguish the temperature classification of hot springs, the former is almost the same as the temperature of the human body, and the latter is the water temperature requirement of the bathing industry, as shown in Table 1.2. [2] The water temperature of Tangshan Hot Spring is maintained at 60-65°C all year round, making it a hot spring.

Table 1: Temperature classification table of geothermal resources

Temperature grading		Temperature t (unit: °C)	Main uses:
High-temperature geothermal resources		$t \geq 150$	Power generation, drying
Medium-temperature geothermal resources		$90 \leq t < 150$	Industrial utilization, drying, power generation
	Hot water	$60 \leq t < 90$	Heating, industrial processes
Low-temperature geothermal resources	Warm hot water	$40 \leq t < 60$	Medical, bathing, greenhouse
	Warm water	$25 \leq t < 40$	Agricultural irrigation, soil heating

Table 1.2: Classification table of hot spring temperature

Type of hot spring	Temperature (unit: °C)	Human sensations
Cold spring	$t < 20$	Slightly cooler
Hot spring	$20 \leq t < 37$	comfortable
Thermal spring	$37 \leq t < 42$	Hotter
High hot spring	$42 \leq t < 100$	Very hot
Boiling springs	$t = 100$	Very hot

According to the national standard "Code for Low-quality Exploration of Geothermal Resources" (GB11615-89), Tangshan Hot Spring is a sulfate spring, which has the effect of treating slow skin diseases, neuralgia, slow digestive diseases, arteriosclerosis and other slow diseases. [2]

2. Sorting out the tourism resources of Nanjing Tangshan Hot Spring Resort

Tangshan Onsen is currently the only hot spring tourist attraction in China that has been certified by the European Spa Association and the Japan NPO Bathing Facility Hygiene Management Promotion Council. [6]

Tangshan Hot Spring Tourist Resort has obvious location advantages, the resort is about 24 kilometers away from the main city of Nanjing, only 35 kilometers away from Nanjing Lukou International Airport, 24 kilometers away from Nanjing Railway Station, Shanghai-Nanjing, S122 Nanjing-Hangzhou Expressway two expressways make it closely connected with the Yangtze River Delta, [7] Ningbai Intercity S6 Line makes the area have a three-dimensional, intersecting traffic system, and has become one of the important transportation hubs connecting Nanjing to Shanghai and other cities.

At the same time, Tangshan has obvious advantages in ecological resources, and is a summer resort in Nanjing, and the temperature in Tangshan in summer is about 3-4 °C lower than that of the main city of Nanjing. Tangshan's characteristic ecological resources make the tourist area suitable for the development of seasonal tourism projects. The daily output of Tangshan hot spring is about 5,000 tons, the water temperature is maintained at 60-65 °C all year round, and there are more than 30 kinds of minerals and trace elements in the hot spring water, which has a healing effect on skin diseases, arthritis and other diseases, and the superiority of hot spring resources is suitable for the development of hot spring recuperation, hot spring vacation and other tourism projects.

Tangshan Hot Spring Tourist Resort gathers cultural tourism resources. In addition to Tangshan Hot Spring, the "Nanjing Ape Man" unearthed in the resort area has advanced the history of human activities south of the Yangtze River by 600,000 years; The legend of Hou Yi shooting the sun also originated from Tangshan; won the Guinness World Record for the Ming Dynasty relics Yangshan stele and Tangshan mine. Tangshan has the cultural imprints of ancient times, Ming Dynasty and the Republic of China, laying a solid foundation for the development of cultural tourism in the resort.

3. Overview of tourism planning and design of Nanjing Tangshan Hot Spring Resort

3.1. Planning and design concept

In 2020, Tangshan Hot Spring Tourism Resort issued the "Tangshan National Tourism Resort Tourism Development Incentive Measures" to stimulate the consumer market through the issuance of consumption vouchers and other methods, reduce the impact of the epidemic on Tangshan's tourism industry, and establish the development concept of "innovative protection of lucid waters and lush mountains is for the benefit of future generations", actively explore the sustainable development of Tangshan's tourism resources, and transform the ecological resources in the region into development capital. [8]

3.2. Planning and design principles

In 2012, the Jiangsu Provincial People's Congress promulgated the Regulations on the Protection of Tangshan Tourism Resources in Nanjing, which protected the hot springs of Tangshan by means of legislation, established the principle of "protecting hot springs is the soul of Tangshan development in the first place", optimized the planning, development and design of hot springs, and standardized the resource development of Tangshan Hot Springs. Implement intelligent management of the whole process of hot spring development planning through big data to avoid the destruction of hot spring resources caused by development; Promote the economical use of hot spring water through price leverage, and reduce the waste of resources for rights protection; Through the control of pollution sources, we will eliminate backward production capacity, strengthen the governance of the ecological environment, and improve the quality and level of hot spring resources.

Tangshan focuses on relying on the relics of Yangshan stele to establish a cultural village, Tangshan Homo erectus site to establish a museum, the former residence of celebrities of the Republic of China and other cultural relics, to enhance the cultural resources such as cultural relics in villages and towns and surrounding fields, and to enrich the cultural landscape of the tourist area. The local government adheres to the development principle of "activating, protecting and cherishing cultural heritage", adheres to the principle of promoting protection through development, and establishes and improves the network for the protection of cultural relics. [9]

At the same time, the local area actively promotes the integration of industry and city, takes the local hot spring resources as an important link and characteristics, connects villages and towns, and supports the development of tourist areas with local cultural and historical characteristics, health and wellness environment, and perfect facilities.

4. Planning and design of key projects of Nanjing Tangshan Hot Spring Resort

Through scientific planning, the resort has reasonably planned the spatial layout, and divided the entire planning area into three parts: the central part highlights the theme of "hot springs",

and focuses on building the core key project of health and wellness characteristics and hot spring health towns through the construction of high-quality tourism and resort facilities and diversified development of cultural products; The southern part closely follows the theme of "agriculture", connects urban and suburban life, and extends the agricultural industry chain; Focusing on the theme of "ecology", the northern part of the country has strengthened ecological conservation measures, "lucid waters and lush mountains are invaluable assets", connecting hot springs and beautiful villages such as Hushan Holy Village, so that urban tourists can get closer to nature.



Figure 4.1: Location map of Tangshan Hot Spring Health Care Town

Image source: Network:<https://www.tsdjg.com/>

In 2012, the hot spring health town was awarded the world famous hot spring town by the World Hot Spring and Climate Health Federation, and was selected as a provincial characteristic town for tourism in September 2020, which is the only characteristic town in Nanjing. The town is characterized by tourism and health care, with health and wellness culture as the core, to create a comprehensive life service system, to build a livable and suitable for recreation of a world-class eco-tourism town, through the planning and design of the hot spring health town to drive the continuous upgrading of Tangshan hot spring tourism resort. Utilize the health and recuperation value of hot springs to vigorously promote the development of the local health industry.

The town planning and design covers educational, commercial, sports and leisure, medical and health care supporting living facilities for all ages, covering the services of the entire life cycle of the owners. The town is planned to be equipped with cultural and educational facilities: Yile College, Cultural and Museum Center, kindergarten and primary school, commercial facilities, leisure places: watchtower park, hot spring resort hotel, etc., as well as medical and health care facilities: Tangshan Branch of the Provincial Hospital of Traditional Chinese Medicine, health care apartments, etc., so that the residents of the town can live in all ages.

Through the development of equestrian open competitions, rock climbing and other events, RV camping, water cubes and other projects to drive the development of the local leisure sports industry, achieve industrial agglomeration, and jointly help build a healthy town; Focusing on the characteristics of local traditional houses, giving full play to the excellent local location conditions, creating the characteristic folk customs of hot springs in every household, providing tourists with poetic living space, enriching tourists' rest carriers, and vigorously developing homestay towns with hot spring characteristics.

At the same time, the ecological hot spring town full of natural interest and modern life is not only a reflection on modern life, but also an interesting exploration of urban development model.

5. Review of tourism planning and design of Nanjing Tangshan Hot Spring Resort

In 2012, Tangshan officially became the largest provincial-level tourist resort in Jiangsu Province and won the honor of "World Famous Hot Spring Town". Tangshan Hot Spring Tourist Resort has made remarkable achievements, but there is still a certain gap from the positioning of building a "world-class and domestic first-class" hot spring tourist resort. [9] Hot spring tourism in the modern sense of China has only a few decades of development history, and there is little discussion and systematic exploration on the development of hot spring tourism resources in the domestic academic circles, and it is inevitable to face some obstacles and contradictions in the process of tourism planning and design. [10]

Japan is the representative of the development of hot spring tourism in Asia, and the Japanese scholar Yamamura Seiji summarized that the development of hot spring tourism resources in Japan has gone through multiple stages of hot spring treatment, recuperation, sightseeing and entertainment. [11] Compared with the planning and design of some hot spring tourism resources in Japan, the problems faced and possible encountered in the planning and design of Nanjing Tangshan Hot Spring Tourism Resort can be summarized as follows: in terms of hot spring tourism resources, the utilization of hot spring resources is relatively simple, and the protection of hot spring tourism resources is insufficient; In the development of hot spring resources, there are problems such as serious homogeneity in positioning, development, service mode, etc., copying foreign culture from Japan and other countries, and lack of local characteristic elements. [12]

Drawing on the successful experience of the development of world-renowned hot spring tourism resources, diversifying the use of local hot spring tourism resources, the planning and development idea of "jumping out of hot springs to do hot springs", taking Tangshan Hot Spring Tourism Resort as a whole, strengthening the support of the hot spring tourism industry while consolidating the cultural heritage, cultivating the derivative agglomeration effect of tourist destinations, and taking modern tourism as the support, developing hot spring food, health products, planting and other derivative products, and e-commerce as the supplementary tourism resource planning, and the excellent national culture through cross-border interaction and other forms is the tourist experience "Intangible Cultural Heritage", an important group around the financial center of Jiangsu, Zhejiang and Shanghai will build Tangshan Hot Spring Tourist Resort into a tourist destination integrating office, leisure and health preservation. [9]

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