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Gardening and Agricultural Application in Chengde Summer Mountain Resort

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Abstract Taking Chengde Summer Mountain Resort for example, agricultural development and application in gardening practices in the flourishing ages of Kangxi and Qianlong, and cultural connotations of valuing the fundamental role of agriculture in national economy were analyzed.

Key words Summer Mountain Resort, Gardening, Agricultural application, Fundamental role of agriculture, Ideology and culture

Chengde Summer Mountain Resort, also known as Chengde Resting Palace or Rehe Temporary Palace, is located in north of the downtown areas in Chengde City, and the narrow valley by west bank of Wulie River. It is the place for emperors of the Qing Dynasty handling affairs and avoiding summer heat, the largest existing imperial garden in the world, world cultural heritage and also national 5A tourist site. Tourism development of the garden has achieved remarkable economic and social benefits, but influence of the agricultural application and development concepts demonstrated in its gardening has been less known. A great deal of agricultural application and development concepts in the gardening contributed to the embryonic form of the concept "agriculture is the foundation of national economy", and exerted lasting and positive influence on the later agricultural application and development and the importance attached to the fundamental role of agriculture. By further exploring its cultural connotations, tourism development level of Chengde and even other cities in the Basin of Luanhe River will be improved, and local economy will be greatly promoted.

1 Traditional agricultural philosophy manifested in gardening of the Summer Mountain Resort

1.1 Human-nature integration Classical Chinese gardens have witnessed slow evolution of content and form. Among the three schools of philosophy, namely, Buddhism, Taoism and Confucianism, Taoism represented by Zhuang Zi has had the deepest influence on gardens. Zhuang Zi believes that all things on the earth are born in the nature, and they are so perfect that human beings must not fight with the nature, but should receive the nature with the concept of "human-nature integration". According to Chinese gardening concepts, the nature has its own soul and beauty, by making the best use of local conditions, all activities should follow the principle of "human-nature integration" but not the "contrary" or "conquering" attitude. In the garden design, rheo-

logical and loose structure is applied to show such a traditional gardening concept, which also complies with the agricultural concepts such as "using favorable weather and geographical position", "choosing right crops for right land".

1.2 Respecting the nature Summer Mountain Resort is different from other imperial gardens, for example, it is too plain as compared to Forbidden City but outstanding for its natural style. By absorbing the essence of natural landscapes, borrowing outstanding scenery from the southern region of the Yangtze River and beyond the Great Wall, the Summer Mountain Resort has become the largest existing imperial garden of China. Traditional gardening concepts such as "taking man-made beauty into the nature, complying with natural laws, but surpassing the natural beauty" are inherited and developed in the Summer Mountain Resort. Site selection and overall design of the Summer Mountain Resort are totally based on natural terrains, and essence of gardening arts in south and north China is integrated in its gardening. Plant landscapes, lakes, grasslands and mountains are perfectly combined to present a splendid image, a masterpiece of classical Chinese garden, thus the Summer Mountain Resort is entitled "Miniature of Chinese Geographical Topography" and "Top Example of Classical Chinese Garden"^[1]. The palace area is characterized by strict layout and plain architectural style, the gardens are outstanding for natural style, harmony between palaces and natural landscapes. Gorgeous rockeries, rare flower and tree species, pines and cranes successfully create a serene garden environment. Respecting the nature, returning to the nature and following natural laws are all manifestations of traditional agricultural concepts.

1.3 Perfect integration of political and recreational functions Gardening is always closely related to politics and cultural transmission. Diversified architectural forms are combined in free styles, man-made garden landscapes and natural mountains and waters coexist harmoniously, architectural cultures of different nationalities are mixed in the Summer Mountain Resort. As the crystallization of imperial garden and temple construction, the Summer Mountain Resort realizes the perfect integration of "palace" and "park", so it is available for not only "handling political affairs", but also "leisure and entertainment". Tourists will enjoy special

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experience when they are approaching the mirage-like building complex. Temple buildings have also distinct political functions, and as an imperial garden, the Summer Mountain Resort shows outstanding political cultural landscapes.

2 Early agricultural development and application demonstrated in the gardening of Summer Mountain Resort

2.1 Introduction and promotion of horticultural crops

Pear Flower Shining with Moonlight in Lishu Yu (Pear Tree Valley), cultivation of new varieties in melon and fruit garden, vegetable garden and peony garden, and application of new technologies set good examples in expanding functions of agriculture, combined agriculture and leisure sightseeing successfully, and contributed to the early advanced agricultural concepts, farming cultures and also modern agricultural tourism. Wild fruit trees such as *Morus alba* L. and *Malus spectabilis* (Ait.) Borkh., wild flowers such as *Syzygium aromaticum*, *Forsythia suspensa*, *Paeonia suffruticosa*, *Paeonia lactiflora*, *Nelumbo nucifera*, *Nymphaea tetragona* are also widely applied in the Summer Mountain Resort. For example, rare lotus varieties such as Chongtai and Qianye are planted in the pool around "Far-reaching Fragrance"^[3]. Wild tree species such as *Koeleruteria paniculata*, *Sophora japonica* Linn. and *Prunus davidiana* are also domesticated, *Bambusa multiplex* and artificial lawns are applied in garden landscaping, which has even influenced the current gardening style, and enriched tree species and plant landscaping connotations of the Summer Mountain Resort.

2.2 Introduction and domestication of wild animals Wanshu Yuan (Garden of Thousands of Trees) is famous for its green carpet, herds of elks, pheasants and hares, luxuriant plants such as pine, locust tree, elm and willow. Cranes and eagles are hovering in the sky, birds are singing in the woods, "beautiful trees provide comfortable shade and keep dust outside, in the woods only elms' and birds' songs are heard". Canglang Yu (Surging Waves Island) has limpid water in which red carps are swimming among lotus and water chestnut leaves^[3]. All of the above presents viewers a peaceful image of wild animals. In front of Songlin Yu (Pine Woods Valley), there is a Deer Domestication Slope recording the history of deer domestication. Domestication of wild deer and red carp set a precedent for domesticating wild animals to serve people, and is even significant for raising deer and domesticating roe nowadays. In addition, by combining with leisure and entertainment activities, the application of wild animals has been broadened, laying a foundation and providing a successful example for the future utilization and functional expansion of wild animals.

2.3 Introduction and utilization of lawn According to archives of the Ministry of the Interior^[2], "(in 1764, the twenty-ninth year of Qianlong Reign, the newly-piled mound at the bank of Beihai Lake was totally covered with turfs (about 28 000 m²), according to the decree". Since more foreign countries established their consulates in China after the Opium War, lawn had been

more applied in courtyard, park and garden. Since the foundation of the People's Republic of China, lawn has been popularized among all newly-built parks, such as Fish Viewing at the Flower Pond in Hangzhou, Changfeng Park in Shanghai, Zizhu Park in Beijing. In Chengde Summer Mountain Resort, lawn is also widely applied for landscaping of the building complexes, and roadside greening, which greatly improves aesthetic, recreational, body-building and nature – cultivation value of garden landscapes and leisure spaces.

2.4 Introduction and promotion of rice and economic crops

Progress of agricultural production is also demonstrated in the promotion of rice and economic crops and introduction of new varieties. Emperor Kangxi chose Chengde for building the Summer Mountain Resort mainly because of Rehe Spring. He once appreciated that rice and melons nourished by Rehe spring water were especially delicious^[3]. He even cultivated the new early rice varieties by using rice seeds from the southern region of the Yangtze River in Fengze Garden of the Sea Palaces in Beijing. When Chengde Summer Mountain Resort was built, the emperor ordered to leave a plot for melons and rice, the early rice seed was taken from Beijing and planted in this plot, the successful application of the early rice in Chengde Summer Mountain Resort ended the history of "no rice planted along the Great Wall". Since then, such early rice had been widely promoted in Beijing – Tianjin region and even South China, the planting tradition in the basin of the Yangtze River – "one crop of glutinous rice and one crop of rice a year" had been changed. As a result, yield per unit area of the farmland was largely improved, providing a material basis for the "benevolent governance" of Kangxi and Qianlong. Development of economic crops is demonstrated as the expansion of sericulture. In the Reign of Qianlong, Han people migrated into Mongolia from Shandong Province brought bristle tooth oak (*Xylosma racemosum*) and tussor to the local area in addition to various vegetables and crops, and taught the locals sericulture technology. Such products as "Dalian Silk" (Dalian is a kind of long rectangular bag sewn up at both ends with an opening in the middle), "cocoon silk" and "silk satin" are co-products of Mongolians and Han people. Prosperity of agriculture drove the economic development of the whole basin of Luanhe River, and became a highlight of the flourishing ages of Kangxi and Qianlong.

2.5 Discovery and utilization of wild plant resources *Lonicera japonica* Thunb. is a historical wild plant resource under certain ecological conditions. Emperor Kangxi once was astonished by the golden and silver flowers of *Lonicera japonica* Thunb, covering the ground of his hunting park, and wrote a poem for it. And when the Mulan Hunting Park was open, Emperor Kangxi went for hunting and found large patches of *Hippophae rhamnoides* L., and also wrote a poem for appreciating it. These stories prove that Emperor Kangxi was particularly fond of wild plant resources, which laid a foundation for the later development and utilization of wild resources. Such wild plant resources as *Lonicera japonica* Thunb.

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and *Hippophae rhamnoides* L. have been developed fully and contributed greatly to local economic development.

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