

# Research on Wuhan Wetland Tourism Resource Development Strategies Based on Sustainable Development Theory

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#### **Abstract**

Wetland is one of the unique ecosystems on earth, which plays an important role in maintaining ecological balance and promoting sustainable economic and social development. As the capital city of Hubei Province in China, Wuhan is known as the "City of one hundred lakes" and the "City of Wetlands", and is a typical representative of lake-type wetlands in the same latitude area and the middle and lower reaches of the Yangtze River in the world. The theory of sustainable development provides important development support for the development of wetland tourism in Wuhan, and through scientific and reasonable application, the wetland can effectively improve the efficiency of tourism resource development, and then continuously enhance the value of Wuhan's tourism brand, enhance the image of tourism destination, improve the popularity and synthesis of scenic spots, and optimize the ecological environment of the city. This Paper takes Wuhan Wetland Scenic Area as an example, analyzes and studies the existing tourism resources and development status of scenic spots based on the perspective of sustainable development, finds out the problems in the current development strategy of Wuhan Wetland Scenic Area through SWOT analysis method, explores some optimize development strategies of Wuhan Wetland Ecotourism according to the principle of sustainable development of tourist attractions, aiming to provide theoretical research reference and practical reference for the current and future development of wetland tourism resources.

Keywords: Wetland Tourism Resources; Sustainable Development; Wuhan; Countermeasure Research;

#### 1.0 Introduction

Wetland is an integrated ecosystem which includes ecosystems such as hydrology, soil, vegetation, and biological environments (Li, Z., Ma, L., Gou, D., Hong, Q., Fai, L., & Xiong, B, 2022). Wetland ecotourism has attracted extensive attention and opened a new field for tourism. Wetlands is regarded as "the kidney of the

earth," has a comprehensive function, wetland ecotourism development brings considerable economic benefit together with social benefit to the tourism destination (Aryal, C. ,2019). Therefore the wetland ecotourism has been developed rapidly with the focus of attentions from governments, various scholars, citizens and tourists. Meantime, Wetland ecotourism development and utilization also brings environmental problems, management problems etc., which has brought a new theme to the research on sustainable development. Wetlands have diversity types, and the geographical distribution is multiplex, which causes the man-land relations get complicated. For instance, the economic development scale and other practical problems made the traditional conventional development mode cannot match with the wetland special geography, natural environment and ecological conditions. So for Wetlands as the unique precious natural resources should be in protection and people has realized its sustainable development model of development research is imminent (Wang, Y., Yao, Y., & Ju, M. 2008). Urban wetlands play a crucial role in sustainable social development (Ying Deng, Z., 2023).

Wuhan, rated as the first world's international wetland city with a population of 10 million in 2022, owns unique wetland resources, which are not only a gift of nature, but also a human effort, and the result of joint efforts from the government to the people. The concept of "cherish wetlands, harmonious coexistence between man and nature" has been deeply rooted in the hearts of the citizen. In Wuhan, everyone is the protector of wetlands, but also the beneficiary of wetlands. Statistics (en.hubei.gov.cn) showed that the wetland area of Wuhan is 162,000 hectares, accounting for 18.9% of the land area, ranking first in the inland sub-provincial city. There are 413 species of wild animals living in wetlands, 38 of which are under state protection. The development and protection of wetland ecotourism in Wuhan should be concentrated on.

#### 2.0 Literature Review

Wetlands, often referred to as the "kidneys of the Earth," play a crucial role in maintaining ecological balance and biodiversity (Aryal, C. ,2019). With the growing interest in ecotourism, the sustainable development of wetland tourism has become a focal point for researchers and policymakers alike. This literature review synthesizes the key findings from recent studies on the sustainable development of wetland tourism, emphasizing the balance between ecological preservation and economic benefits.

## 2.1 Introduction to Wetland Tourism and Sustainability

Wetland tourism development has been a subject of increasing scholarly attention due to its potential for environmental education, conservation, and community development (Dar, Bhat, Rashid, & Dar, 2020). Sustainable development in this context involves managing wetland resources in a way that meets the needs of the present without compromising the ability of future generations to meet their own needs (Diamantopoulou & Voudouris, 2008).

## 2.2 SWOT Analysis in Wetland Tourism

SWOT analysis (Strengths, Weaknesses, Opportunities, Threats) is a systematic strategic analysis tool used to identify internal strengths and weaknesses, as well as external opportunities and threats of an organization or project. This method was proposed by Professor Andrews of Harvard Business School in the 1960s. Its core is to help decision makers make more targeted strategic plans through comprehensive analysis of internal and external environment. SWOT analysis has been widely used to assess the strengths, weaknesses, opportunities, and threats associated with wetland tourism development (Zhang, Zhu, & Gao, 2022). Studies such as those by Zhang et al. (2022) highlight the importance of habitat diversity and tourists' visual preferences in shaping sustainable tourism strategies. The integration of SWOT analysis with sustainable development goals provides a comprehensive framework for decision-making in wetland tourism management.

## 2.3. Ecological Impacts and Conservation

The ecological impacts of tourism on wetlands have been a significant area of study. Research by Li, Ma, Gou, Hong, Fai, and Xiong (2022) emphasizes the hydrological effects of urbanization on wetland ecosystems and the importance of climate change adaptation measures. Conservation efforts, such as the restoration of wetlands in Poyang Lake, showcase successful ecological restoration practices that can be replicated in other regions (Li et al., 2022).

## 2.4. Community Participation and Benefits

Community involvement is essential for the sustainable development of wetland tourism. Local communities must benefit from tourism activities for it to be sustainable (Wang Ling'en & Ding Jiaqi, 2024). Studies suggest that community participation not only enhances the cultural value of wetland tourism but also ensures that the benefits are equitably distributed (Wang Ling'en & Ding Jiaqi, 2024).

#### 2.5. Innovation in Research Methods

Innovation in research methods is crucial for advancing wetland tourism research. The use of social media data, as explored by Zhang, Zhu, and Gao (2022), provides a new perspective on tourists' preferences and behaviors. This approach offers valuable insights into how sustainable tourism practices can be better tailored to meet visitors' expectations while preserving wetland ecosystems.

The literature underscores the importance of a multidisciplinary approach to wetland tourism development, integrating ecological, social, and economic considerations. For wetland tourism to be sustainable, it must be based on a solid understanding of ecological processes, respect for local communities, and innovative management practices that balance conservation with development.

Wuhan, as a typical representative of inland wetland, the protection, development, management and utilization of wetland is always worth studying.

## 3. 0 Wuhan Wetland Eco-tourism Resources and Utilization status

Wuhan city, the capital of Hubei Province, is located in the east of Jiang Han plain, is a mainly plain of China. The Yangtze River, Han Jiang River in the converging in Wuhan city, located in the subtropical monsoon zone. It has flat topography, rivers, lakes dotted, is a typical lakes wetland types, known as "hundreds of lake city". Through remote sensing, geographic information system for wetland in Wuhan city were investigated, it is concluded that the Wuhan city wetland area is 3195.71 square kilometers, about 37.62%. Among the two types, natural wetland and constructed wetland cover 1438.62 square kilometers and 1757.09 square kilometers respectively, accounting for 16.38% and 20.68% of Wuhan's total area.

## 3.1 Types of wetland resources in Wuhan

In the investigation of Wetland Resources in Wuhan, Wuhan Forestry Department found that the existing natural wetlands mainly include rivers, lakes and swamps, while the constructed wetlands mainly include ponds and rice fields. It is divided into six categories: constant rivers, flood plains, constant freshwater lakes, grasslands, ponds and rice fields. Among them River wetland and Lakeland is the dominant form of Wuhan wetland ecotourism resources.

## 3.1.1 River Wetland

River wetland in Wuhan city with a total area of 5.16% of the total area of Wuhan city, Covers 438.42 square kilometers. The river network of Wuhan is dense, there are 172 river sections excluding the Yangtze and Han rivers. And among them 165 rivers' length in the urban area is more than 5 kilometers. In them, there are 115

rivers in the northern part and 57 rivers in the southern part of Wuhan, which forms the Yangtze River system with the Yangtze and Han rivers as the axis.

#### 3.1.2 Lakeland

The lake wetland lakes in Wuhan city wetland is given priority to with perennial freshwater lake, an area of 960.94 square kilometers, about 11.31% of the lake marsh wetland in Wuhan city, is one of the world's largest natural wetlands. There are 166 lakes, of which 43 are in the urban area. Cai Dian Sediment Lakes and Liang zi Lake (west), etc.. Lakes are important wintering habitat of Wuhan city, with an important survival environment. These waters have a broad space for fishing, fish can develop various resources and aquatic biological production. Owned large and medium-sized lakes in Wuhan city, contains abundant water resources, diversity of aquatic plants, abundant food and many economic fish, is a shinning pearl in the field of aquaculture in the country.

## 3.1.3 The Swamps, Marshes & Meadow Wetland

Meadow wetland in Wuhan city is widely distributed in great quantities, including lakes overbank and the central bar region occupies 39.26 square kilometers area, but the number was only 0.46% of the total area of Wuhan city, so it is not remarkable in the national Swamps and Marshes, Meadow Wetland. In recent years, with the accelerating urbanization, population growth and industrial and agricultural production development, great changes have taken place in the marsh wetlands. Cai Dian District is the most extensive wetland of this type.

#### 3.2 Status Ouo of Wetland Resources Protection and Utilization in Wuhan

There are 165 rivers and 166 lakes in Wuhan, and the wetland area is 162,000 hectares, accounting for 18.9% of the city's land area. It is known as "the city of 100 Lakes" and "the City of Wetlands". At Present, Wetlands Parks and River bank parks are the main forms of tourism development.

#### 3.2.1 Wetland Parks

There are 1 international important wetland, 6 national wetland parks, 4 provincial wetland parks, and 5 wetland nature reserves above the municipal level, which together contribute the wonderful foundation wetland ecotourism resources for Wuhan City.

## 3.2.1.1 The International Important Wetland: Cai Dian Submerged Lake.

The wetland is located in the southwest of Cai Dian District in Wuhan City. It is mainly composed of Cai Dian Submerged Lake, Zhang Jia Lake, Wang Jia Shi Lake and part of Du Jia Tai flood storage area, with a total area of 174,000 acres. Cai Dian Submerged Lake Wetland of International Importance is located on the East Asia-Australasia route, one of the main migratory routes of global migratory birds. With the continuous improvement of the ecological environment of the sunken lake wetland, it has become a paradise for migratory birds to overwinter. Cai Dian Submerged Lake Wetland is one of the best ecological protected wetlands in the same latitude in the world, and it is one of the five major bird distribution areas in China. There are 153 species of bird resources, and tens of thousands of water birds such as wild geese, ducks and swans wintering here every year. The Oriental white stork, a first-class bird under state key protection, accounts for one eighth of the global population.

#### 3.2.1.2 Six National Wetland Parks

#### **Wuhan East Lake National Wetland Park**

East Lake National Wetland Park is located in the main urban area of Wuhan City, the largest urban lake in the country in the area of the East Lake, mainly including Tuan Lake, Hou Ku Lake, Yu Jia Lake, the total area of 10.2 square kilometers. The water area is 6.5 square kilometers, the land area is 3.7 square kilometers, and the wetland rate is 63.7%. The East Lake National Wetland Park in Wuhan, Hubei Province is divided into three functional areas, which are wetland ecological protection area, wetland ecological viewing area and wetland management research supporting area. In order to strengthen the construction of the East Lake National Wetland

Park, fully consider the actual situation of the wetland park, according to the needs of construction and management, the feasibility study report on wetland protection and restoration of the East Lake National Wetland Park is prepared, and it is planned to further subdivide it into five districts on the basis of the original three districts - publicity and education district, restoration and reconstruction district, ecological conservation district, rational utilization district and management and service district.

In 2008, Wuhan East Lake National Wetland Park was approved by the State Forestry Administration as a national wetland park construction pilot unit. In December 2014, it was approved as a national wetland park by the State Forestry Administration.

#### Jin Yin Hu National Wetland Park

Jin Yin Hu Wetland Park is located in the Dong Xi Hu Lake District of Wuhan City. Built in 2001, it is one of the largest urban wetland parks in Wuhan City. It is also a natural ecological suburban wetland park with aquatic plants as its main feature. At present, there are 188 species of plants in the park, and more than 10 species of perennial birds, forming a population.

## Hou Guan Lake National Wetland Park

Hou Guan Hu Wetland Park is located in the northeast of Cai Dian District, consisting of Zhi Yin Lake, Pi Si Sea, Shau Kei Lake, Wang Jia Lake, Gao Lake and coastal land. It covers an area of 3186.3 hectares, three times the size of East Lake Wetland Park, and is the largest wetland park built in Wuhan. It is a wetland park with beautiful scenery and poetic scenery, and is also an excellent choice for camping in Wuhan.

## **Cang Long Island National Wetland Park**

Cang Long Island National Wetland Park is located in the Cang Long Island Science and Technology Park of Jiang Xia District, including Yang Qiao Lake, Shang Tan Lake, Xia Tan Lake, Yu Ye Beach, Star Forest and other areas, with "Eight views of Zang Long", "Twenty-four Bridges of Yang Qiao Lake" and other landscapes. The park is home to black-spotted frog, Chinese toad, black snake, ocelot and other provincial-level protected animals, as well as Myths, swallows, black water chickens, grey magpies, great tits and other provincial-level protected birds.

#### **An-Shan National Wetland Park**

An-Shan National Wetland Park is located in An-Shan Street, Jiang Xia District, with a total area of 1215.26 hectares. The park is mainly composed of lake wetlands, including Shang Sha Lake, Lu Lake, Liang zi Lake, Niu Shan Lake, etc. At the same time, there are some swamp wetlands, the wetland rate is 77.53%, and two species of national Class I key protected wild animals have been found and distributed there. There are 4 species of State II level key protected plants, 11 species of State II level key protected wild animals, and 51 species of Hubei level protected wild animals.

## **Dugong Lake National Wetland Park**

The Wetland Park is located at Bai Quan Farm in the Dong Xi Hu District. It is a typical super-large country park. It includes two lakes, Ha Mo Jiao Lake and Tu Gong Lake. The wetland area is about 3.6 square kilometres. According to the topography and distribution of animals and plants in the wetland park, Dugong Lake has set up six fixed monitoring points for animals and plants, which are specially used to monitor 139 species of birds and 177 species of primitive plants here.

## 3.2.2 Riverside Parks

Wuhan Riverbank is the general name of Hankou Riverbank, Wuchang Riverbank, Hanyang Riverbank, Qingshan Riverbank(partly overlapping with Wuchang Riverbank), Hong Shan Riverbank, Qiao Kou Riverbank (Han jiang Riverbank). Among them, Hankou River Beach is the most complete and famous.

Wuhan City has made a pioneering effort to combine the safety regulation of embankments with the construction of waterfront environment, and vigorously promoted the construction of two rivers and four banks since the flood in 1998. After that, more than 20 years of unremitting efforts were tried by the government, scholars, citizens, etc. the city has been built about 80 kilometers of waterfront ecological space with an area of 8.3 million square meters and 4.7 million square meters of green space. According to incomplete statistics, 50 million people and tourists come to riverside parks every year. Truly become a Public's paradise.

Hankou Beach Park was built in order to change the chaotic environment of overflowing sewage and factories, and the concept at that time was to make a leisure space so that citizens could go to the beach to stroll around, which was based on hard pavement.

Wu Chang Riverbank has no beach, the beach is relatively narrow, and the form of river scour is different from Hankou Riverbank. Designers had made some improvements in combination with the topography and features of the riverbank and the shoreline. It can be said that Wuchang Riverbank has a certain agreement with nature:

HanYang Riverbank Park, once considered the lack of cultural elements in the previous riverbank, now the Zhi Yin Culture, DaYu Culture and HanYang Culture were integrated into the construction process.

Qing Shan Beach Park, gentle slope embankments were built, and the concept of sponge city was integrated, so that urban waterlogging and waterlogging water could be absorbed into the beach through sponge. The ecological construction concept of Qingshan Beach has been highly recognized, and in 2017, Qingshan Beach won the global C40 "Future of the City" award.

## 4. SWOT Analysis on the Development of Wetland Ecotourism in Wuhan

## 4.1 Strengths Analysis

#### **4.1.1 Abundant Wetland Resources**

Wuhan city, located in the subtropical monsoon climate zone, has abundant precipitation resources, good light, heat environment and abundant wetland species. It

possesses a total of more than 400 kinds of wetland plants and 477 species of wetland animals, including 10 species Rank I protected animals and 20 species Rank II protected animals.

Wuhan is located in the east of Jianghan Plain, to the south of Dabie Mountain, the overall terrain is gentle, the terrain is high in the south and low in the north, and the mountain is fluctuating. Since the area is located in the north-south transition zone, the color of transition is very significant. The area of wet land ecosystem presents a diversified ecological types, the structure also presents a high degree of complexity.

## **4.1.2** Convenient Location and Transportation

Wuhan is a famous historical and cultural city in China, known as the "thoroughfare of nine provinces". In rivers, lakes, cover vast territories. It has convenient transportation and good natural conditions, and form a by air, sea and land, and a three-dimensional transportation network extending in all directions.

About the Waterway, the Yangtze River and Han Jiang river intersection, six of the Yangtze river bridge across the Yangtze river, Wuhan and Yellowstone two ports have been open to the world, sea transport ships can pass the harbor to southeast Asia and other countries.

As railway, Wuhan is the one of four major railway hubs in China, therefore, it has become an important way for the development of tourism industry. In particular, the opening of Wuhan-Guangzhou high-speed Railway has expanded the space of passenger source market in South China. In addition, Wuhan railway station is the most well-equipped in China.

In aviation, Wuhan Tianhe airport has become a central China's largest and most complete can work, can reach more than 60 cities in the modern airport, is an important channel of Wuhan long-distance passenger travel.

As a central city in Wuhan city circle megalopolis, strong radiation effect to the tourism industry in surrounding areas.

## 4.1.3 Policy Environment

The government of Wuhan has increased its support for the macro economy. In the overall planning of "**Hubei province tourism development: 2005-2025**", the ecological tourism development of Hubei, respectively from the ecological tourism, construction of small towns, ecological tourism, and other aspects are discussed. The plan emphasizes tourism as the center, bringing together all economic activities.

On the wetland protection and utilization, to around 2025 Wuhan will build 20 wetland construction into wetland parks, strengthen the natural and ecological protection of the wetland, makes it reach the purpose of reasonable development and utilization.

Wuhan city has set up a leading group led by city leaders of wetland protection, to be responsible for the city wetland protection work, and the wetland protection into the "difference" in planning, its significance is very significant.

## 4.2 Weaknesses Analysis

## 4.2.1 Lack of Brand Image

Wuhan hasn't been a tourism destination, for has no such famous scenic spots as Xi'Xi wetland in Hangzhou, Sichuan Jiu Zhai Valley etc. After the founding of China, the fresh water wetland in Wuhan serious atrophied by reason of reclamation and sedimentation. At present, Wuhan is given priority to agriculture, fishery, in the suburbs of Wuhan, where the confluence of wet land and rivers, the area of relatively flat terrain, basic is surrounded into farmland; Some lakes are still predominantly aquaculture in this area, but because of its scale has been far beyond its carrying capacity, combined with the traditional way of extensive cultivation, causing water quality worsening, bring serious negative effect to the lake ecological environment.

## 4.2.2 Insufficient Tourism Industrial Competitiveness

Wuhan is still only a "big city of tourism resources", not a "strong city of tourism resources", which caused Wuhan hasn't been a tourism destination yet. Compared with other industries, the leading role of tourism industry is relatively weak. Wetland ecotourism, as an innovative ecotourism model, shows the significant benefits brought by wetland protection and utilization. In recent years, all countries in the world have made great efforts to develop ecological tourism as a new growth point of their national economy.

#### 4.2.3 Limited Management Service Level

At present, the tourism system of Wuhan is not perfect, and the development of tourism is also chaotic. In the current market, there are a large number of small tourism enterprises, their quantity, small scale, vicious competition, resulting in a decrease in the level of service, destruction of the tourism market of policy management order. In addition, from the perspective of the upstream and downstream of the tourism industry, it has not yet formed a certain scale. Therefore, some illegal acts and fake and shoddy acts often appear, but they cannot be timely supervised, causing great obstacles to the development of Wuhan's tourism industry.

### 4.3 Opportunities Analysis

#### **4.3.1 Market Opportunities**

With the deepening of the concept of global sustainable development, ecotourism has become a new trend. China Tourism Academy (Data center of the Ministry of Culture and Tourism) released the "2023 China Tourism economy operation analysis and 2024 development forecast" shows that after comprehensive research and adjudications, it is expected that the number of domestic tourists in 2024 will exceed 6 billion, and the total number of inbound and outbound tourists is expected to exceed 260 million.

Tourism as the implementation of the "holiday economy", is the larger development, tourism has a bigger development. In addition, people more and more favor with the original features of nature, humanistic, and ecological tourism products, which provides development chance for the development of ecological tourism.

## 4.3.2 Policy Opportunities

Central proposed guided by the scientific concept of development of the regional development strategy, aims to promote the "The Rise of Central China" into the process, the provinces in Central Chian actively introduced preferential policies to inject strong vitality to the development of tourism. For those who have suffered some degree of interference and destruction, but at the same time have a certain value of ecological tourism areas, we should be a priority of the construction of the object. Wuhan government put forward to strengthen the water surrounding the lake reservoir domain and river beach area wetland resources investigation and research work. By 2023, the Wuhan city built 20 of the construction of a number of wetlands, lakes and wetlands to satisfy the needs of the local ecological environment.

## 4.4 Threats Analysis

### 4.4.1 Fierce Regional Competition

Provinces in Eastern and Southern China, as a relatively developed area tourism, the tourism management system more perfect, tourism products is also more mature; Meanwhile, the western region has the policy of China's Western Development Program with plentiful outstanding tourism resources. Each region is trying to develop the tourism industry as a pillar industry of its economic, pushing out the respective tourism brand, strive for a share in the western tourism market. This makes the tourism industry competition more fierce, how to stand out in the competition, to find their own market positioning, create special tourism products, attract tourists is particularly important.

## 4.4.2 Main Problems in Wetland Ecotourism Development

At present, the wetland ecotourism in our country is in the process of development, there is a problem of low visibility; The overall image of the tourism destination is not enough and bright, the theme of the tourism destination is not enough. Part of the lakes in Wuhan city in the development process there is a blind, the problem of excessive pursuit of economic efficiency, combined with the current economic policy on sustainable development of wetland is not yet perfect, leading to a fall in ecological benefits, such as resources waste problem. In recent years, countries have issued a series of policies and regulations, to promote the development of wetland ecotourism for the wetland ecotourism development policy provides a solid guarantee. However, wetland ecotourism in our country is still in its infancy, and there are still many problems in the development process, which need us to take effective measures to solve them.

## 4.4.3 The Lakes and Wetlands Decreased Sharply with Urbanization

According to statistics, the water area of Wuhan city has experienced a fair degree of atrophy, and presents a continuous decrease trend. Reclaiming land from seawaters in excessive due to human development, such as landfill, etc., the area of the lake wetland by gradually shrinking, the trend has become increasingly apparent. In addition, the soil erosion caused by human activities, with the arrival of the flood, a large amount of sediment was taken to the rivers and lakes, causing siltation and contraction of the rivers and lakes, led to the lake area is shrinking. The destruction of the ecological system also includes a large number of biological habitat loss, such as the mangrove wetlands in, salt marsh wetland, peat swamp wetland, etc., this type of wetland is largely by microbial action to keep the soil and maintaining ecological balance, but because of the influence of human activity, this kind of wetland is disappearing.

#### 5.0 Recommendation

Based on the theory of sustainable development, combined with the SWOT analysis of the development of wetland tourism resources in Wuhan, this study puts forward the following principles to be followed and feasible countermeasures. Ahmad Salman (2020) pointed out that with the deepening of the concept of global sustainable development, ecotourism has become a new trend.

## 5.1 Some Principles Suggested to Follow

## **5.1.1 Principle of Ecological Security**

Ecological Security" is the basic principle. The natural state of Jiang Han Plain, the "province of a thousand lakes" in Hubei Province, has been seriously damaged due to excessive reclamation and water pollution. Therefore, when developing ecotourism, we must adhere to the principle of "Ecological Safety".

### **5.1.2 Protective Development Principles**

Ecological tourism should be carried out in wetlands by focusing on protecting rare and endemic wild animals and plants in protected areas. Wuhan is a typical inland wetland, the rich biodiversity, area of resource scarcity, has not only a high value of science and technology and culture, but also a very sensitive system. Therefore, when carrying on the wetland tourism designing and developing projects, we should take the ecosystem as the first goal, from the perspective of ecological benefit and long-term benefit.

# **5.1.3** Principle of Sustainable Development

Based on the concept of sustainable development, combined with the coordinated development of urban planning and regional economy. If the wetland is located in an economically developed and densely populated area, in the process of protection, attention should be paid not only to the impact of the residents' production and lifestyle on the ecological environment of the reserve for this generation, but also to the social and economic impacts caused by the protection of wetland resources, and a sustainable development path should be sought to better coordinate protection and development for the sub-generations. To achieve economic, social and ecological interests balance, so as to achieve the purpose of sustainable development.

## 5.2 Strategies for Development of Wetland Ecotourism

#### 5.2.1 Establish Wetland Tourism Brand

Will discover unique wetland tourism in Wuhan, and infuse a cultural connotation, can make it a stronger vitality, make its more influential, make its more thorough popular feeling, to improve their loyalty, and lift the attractiveness and competitiveness. Wetlands in the build up a mature brand, you can use the effective media form for transmission, thus improve its influence. At the same time, also can strengthen the tourism services, the specific content including: use of facilities, equipment, products, and the staff service attitude, let visitors from the material and mental can be to gain satisfaction. Perfect tourism products, improve competitiveness, to make Wuhan wetland tourism competitive, first in terms of market positioning accuracy, clear the market demand.

## 5.2.2 Detailed Layered Partition Protection and Development

First, to ecological system of wetland ecological system of science assessment, set up in the ecosystem "in fan area" and "buffer", "demonstration area" and "reserve" distinguish strictly, to ensure its strict; Further planning and the expansion of the wetland reserve, it is necessary, and the possible impact on the wetland, hurt activities in strict control, to ensure the safety of the wetland. In the end, will have to insist on the concept of wetland development and protection as the guide to throughout the development of tourism and development, and in all aspects of tourism publicity, from senior tourism management personnel to the grass-roots staff, from the grass-roots staff to directly participate in tourism tourists, from direct visitors to potential tourists, Finally realize the harmony of the development of tourism and ecological protection is neck and neck.

## 5.2.3 Highlight the Development Focus of the System Supporting

The tourism resources of a region have their irreplaceable characteristics and defects. The only way to change the status quo, is within the scope of the larger area, using their own resources advantage, strengthen the collaboration of the development of the tourism area domain, achieve the goal of win-win strategy.

There are a large number of wetlands distributed in the tidal plains along the Yangtze River in Wuhan, which contain a large number of wetland genes, which is recognized as a "wetland gene treasure house" in the world. Therefore, based on this, ecological tourism routes and main scenic spots should be optimized by combining with local animal and plant resources, and the linkage with surrounding areas should be strengthened to achieve the best integration and allocation effect. Establish and improve the eco-tourism service center, with the goal of

providing excellent tourist services, formulate eco-tourism plans and guidelines, promote the advantages of wetland resources and the characteristics of eco-tourism, and publicize rare bird species.

## 5.2.4 Establish Ecological Monitoring & Ecotourism Management Mechanism

Ecological monitoring system's main duty is to ecological protection, optimization and balance as a starting point, the ecological tourism activities of supervision and security, to ensure the normal conduct. In many natural protection area in our country at present are built a certain number of wetland, the wetland as a subsystem of the natural ecosystem, for maintaining regional ecological balance play a considerable role. Biodiversity research of wetland ecosystem and the sustainable development for wetland ecological tourism environment effect of hysteresis has the vital significance, based on this, this article USES the "3 S" technology as a comprehensive monitoring of regional ecological environment, cultural landscape, ecological environment protection, ecological environment protection monitoring method.

## 5.2.5 Advocating & Promoting the Coordinated Development of Ecological Protection and Economy

Strengthening ecological and environmental protection of the wetland resources of this area, the government makes the uniqueness of the wetland resources, standard type and diversity to get more recognition and attention, raises public awareness of this generation to enjoy the rights of natural resources, prevent improper use. And on this basis, looking for the local economy and the ecological harmony between the road of sustainable development. Through cooperation with local governments in the field of protection, make the residents in the wetland ecological tourism planning, development, construction and management of both pay attention to protect, and pay attention to the local economy, the local ecological tourism obtains the good economic benefit, local residents' interests are protected, people can consciously protect the wetland ecological environment and for the sustainable development of ecological tourism to create a good space.

#### **6.0** Conclusion

For the future, the development of wetland tourism resources in Wuhan should pay more attention to ecological protection and sustainable development. By strengthening scientific planning and management, promoting the construction of smart wetlands, and enhancing public participation, wetland tourism in Wuhan will usher in broader prospects for development. At the same time, combining modern technology and cultural tourism elements, Wuhan is expected to become a well-known wetland tourism destination at home and abroad. To sum up, the development potential of wetland tourism resources in Wuhan is huge, but it also faces many challenges. Through reasonable development strategies and measures, it is possible for Wuhan to realize sustainable development of tourism while protecting the ecological environment.

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