

Recommendations for Developing Ecotourism in Can Gio Mangrove Biosphere Reserve of Ho Chi Minh city

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Abstract

Can Gio Biosphere Reserve-a suburban district of Ho Chi Minh City, Vietnam, has been recognized as a world biosphere reserve by UNESCO since 2000. Can Gio has been built into an ecotourism place with a rich flora and fauna, rich historical culture while ensuring ecological balance, attracting tourists and greatly contributing to the development of the city's tourism industry. In terms of conditions for designing and organizing attractive tours with rich products and services, Can Gio has not been exploited effectively. The number of visitors to Can Gio is still modest, this place is only exploiting ecotourism, there is almost no excellent entertainment, shopping and resort. Although there are so many advantages, the exploitation and investment are not in the right range, therefore the potential here has been wasted over the years. We should have many more tourist products and services in order to attract tourists to this destination. The article is completed based on data from studies and actual survey process. The results show that the potential for tourism development here is huge and requires further breakthroughs in thinking and action.

Keywords: Ecotourism, development, tourism, Can Gio mangrove forest

1. Introduction

Ecotourism is considered as a type of preeminent tourism because of the great benefits it brings. In addition to contributing to the conservation of nature and protection of biodiversity, ecotourism development has brought great economic benefits to places with natural reserves and ecological landscapes. In addition, ecotourism also contributes to raising awareness of nature conservation through environmental education activities [1].

With a very specific ecosystem, the Can Gio Mangrove Biosphere Reserve can be considered to meet the first requirement of having a resource that is especially important for ecotourism [2]. This activity brings both practical economic benefits in tourism and also contributes to the conservation of mangrove protected areas and contributes to environmental awareness raising for tourists [3]. Can Gio mangrove forest not only plays an important role in natural disaster prevention but also a green lung of the big cities in the surrounding areas and is a source of many valuable aquatic species. It can be said that this forest will contribute to the development of Ho Chi Minh City, Vietnam in particular and to the development of the world.

2. Content of the research

2.1 An overview of Vietnam's ecotourism

Ecotourism includes visiting orchards and rivers is quite rich. Vietnam currently has 33 national parks, 9 world biosphere reserves and hundreds of natural reserves distributed throughout the country [3]; it has diverse ecosystems with high biodiversity values (coral ecosystems; wetland ecosystems; coastal sandy ecosystems; tropical forest ecosystems, etc.). In addition, the Mekong Delta region has

a cramped system of canals, mangrove forests, and gardens full of lush and fruitful fruit all year round, etc.



A boat visit through the forest in Mekong delta

These are really valuable resources and a strength of Vietnam for developing ecotourism, river tourism, and country garden tourism. With these unique resource values, Vietnam tourism can exploit the construction of the following typical tourism products: research tourism, ecology (watching zoo in Cat Tien National Park; bird watching in Tram Chim garden, scuba diving and watching coral in Ha Long, Nha Trang Bay, Con Dao, Phu Quoc island; watching turtles spawning in Con Dao, etc.); River water tourism - gardening (visiting gardens, enjoying fruit trees and Don Ca amateurs in the Mekong Delta; visiting floating markets; exploring mangrove forests of Can Gio, U Minh, Dat Mui, etc.).



Tram Chim national park in Mekong delta

The tourism products in the group of ecotourism, fruit gardens and rivers can cater to high-income visitors, young to middle-aged and of course people who love to explore nature or visitors who can come from all countries, especially Japan , America, Western European countries, etc.

2.2 An overview of the Biosphere Reserve of Can Gio area

In recent years, Can Gio tourism in general has developed rapidly with many types of services attracting a large number of tourists to Can Gio, especially on weekends and holidays [2]. The highest number of visitors are the festivals. It is expected that the number of tourists will increase in the future thanks to the upgraded Rung Sac road, better promotional activities for Can Gio tourism and the increasing demand for sightseeing tours.

In particular, Can Gio is considered as an ecotourism center with a very important role in the development of the southern key economic region, in which mangrove eco-tourism is of top value.

The typical ecosystem of the coastal mangrove forest is [3] a unique feature that makes Can Gio different from other destinations in the city and neighboring provinces. The Biosphere Reserve of Can Gio mangrove forest serves as a place to study and survey students as well as domestic and foreign scientific researchers; attracting a number of tourists combining sightseeing and scientific research, especially interested in ecotourism [4].



Can Gio Mangrove Forest

Coming to the Biosphere Reserve of Can Gio mangrove forest, visitors can immerse themselves in the vast natural space with green forest canopy, enjoy the fresh and calm atmosphere [2]. On the other hand, this is also an opportunity for visitors to have interesting experiences about nature and useful lessons in awareness of the role and value of mangroves.

2.3 The flora-fauna diversity of the Can Gio Biosphere Reserve

Can Gio mangrove forest is considered a rich resource and high value of the city. Ho Chi Minh. During the Indochina war, the French spent 4,000 hectares of forest as protection forest for the purpose of improving the climate for the inner city of Saigon, and 500 hectares of forest around coastal villages to protect against erosion, storms. . And due to the American war in Vietnam in the 1960s, toxic chemicals were sprayed on the Can Gio mangrove forest, making the forest ecosystem poor, human and wild birds, brackish water aquatic species are also gone [4].

After 1975, the Can Gio biosphere reserve was restored and managed and protected. Up to now, Can Gio mangrove forest has nearly 35,000 hectares. The good recovery and development of the mangrove ecosystem has turned the abandoned, bare land destroyed in the past into immense green forests, beautiful landscapes and favorable habitats for organisms proliferate and develop [5]. Can

Gio forest ecosystem has 700 species of aquatic animals, 137 species of fish, more than 40 species of vertebrates, about 130 species of birds. Many precious birds and animals return and increase their flock very quickly. In addition to bats, monkeys, crocodiles, Vam Sat bird sanctuary has about 2,000 children of 26 species. Animals such as pigs, wild cats, weasels, otters, pythons, snakes and many other animals are found throughout the high mounds of the Can Gio mangrove forest. In terms of flora, most of the major plant species of the mangrove forest are present in the Can Gio forest [2]. Can Gio Biosphere Reserve has 220 species of plants; in which the families with the most species include: family Asteraceae (8 species), Euphorbiaceae (9 species), Rhizophoraceae (13 species), Cyperaceae (20 species), Poaceae (20 species), Fabaceae (29 species).

2.4 Some limitations of the Biosphere Reserve of Can Gio

Visitors to Can Gio mostly just come to see, supplementary services are not available. Japanese visitors are very interested in the tours of planting forests for environmental protection at Can Gio Ecotourism Area, but most of them also go once. Overall, the number of visitors is low and the return rate is almost zero [5].

In fact, there is nothing to retain tourists to come back in the future. The scenery of the mangrove forest and the river is the same everywhere, a few hours boat ride is enough [4]. If you want to turn Can Gio into a big tourist destination with many Vietnamese and international tourists coming and staying for a long time, you must invest in many items [3]. We cannot develop tourism anywhere without investing money and effort. Can Gio until now is only potential because it has not been invested. Although there are many advantages, Can Gio's tourism products are not attractive, the connection of points and routes is not reasonable, especially the long time when the train is running on the river, there is still a lack of facilities, especially Activities for tourists on board [1].

2.5 Development potentials the Biosphere Reserve of Can Gio

Can Gio district, Ho Chi Minh City has many favorable conditions to develop ecotourism combined with spirituality. However, at present, Can Gio's tourism industry has not developed to its full potential. With more than 13 km of sea routes, river systems, especially mangroves, recognized by UNESCO as the first world biosphere reserve in Vietnam, are eco-tourist destinations for visitors to experience when coming to Can Gio. In addition, the district also has a national-level historical relic zone of Rung Sac; The traditional festival of Can Gio fishermen is a national intangible heritage; Traditional craft villages of the people such as salt craft, models of aquaculture, swiftlet farming, etc. are also interesting destinations for tourists [6].

Table 1. Number of tourists coming to the Biosphere Reserve of Can Gio over the years

Year	2010	2017	2018	2019
No of tourists	400.000	1.500.000	2.000.000	2.200.000

Can Gio district, Ho Chi Minh City has many favorable conditions to develop ecotourism combined with spirituality [4]. However, at present, Can Gio's tourism industry has not developed to its full potential. Taking advantage of natural resources and efforts of all economic sectors, communities and local authorities, Can Gio tourism has achieved certain results. 2011 period -2016, Can Gio has attracted more than 3.4 million visitors each year. If there were only 410,000 tourists in 2010, by 2018, the number of tourists to Can Gio reached nearly 2 million, an increase of more than

500%. In 2010, the revenue reached 123 billion VND, in 2018, there was more than 900 billion Vietnam dong (VND) in revenue, an increase of more than 700%. But compared with the potentials and advantages of Can Gio, the above results are still not adequate [3]. Therefore, it is necessary to concretize the vision and roadmap, vision and aspirations to build Can Gio into a regional and world-class eco-tourism area. At the same time, focus on promoting investment in transport infrastructure, social infrastructure, commercial facilities, services and tourism (Table 1).

The increasing number of tourists coming to eco-tourism sites in Can Gio Biosphere Reserve is also an important factor affecting the mangrove ecosystem, if they are only interested in entertainment needs but not in mind how to conserve local tourism resources [2]. In addition, in order to serve tourists, infrastructure and services have been built inside the forests. Frequent tourism has changed the ecological characteristics and conditions of these areas. Thus, the risks to forest resources due to the impact of tourism are therefore also at increasing risk [7].

3 Methodology and Results

The article is done with the help of interviewing and filling in the survey. The respondents (50 people) are tourists, guides, people who have visited Can Gio and staff who are working here. The questionnaire includes a number of questions that have been prepared in paper form or online. In the form of interviews, they will answer directly or through means such as Facebook, Zalo, etc.

Despite having rich resources with specific ecosystems and activities of coastal residents, effective exploitation of ecotourism in Can Gio Biosphere Reserve, with strict requirements of this type of tourism. need the contribution of appropriate human resources [4]. Tourists themselves, through the way they understand, organize, manage or directly implement ecotourism activities, have a great impact on the effectiveness of ecotourism.

Through the survey results, the care of wild animals according to the staff here is not very suitable with the principles of wildlife conservation [3]. Animals are not kept in captivity, but rather like in a zoo, making visitors feel like in the zoo instead of in the wild.



Some fun activities in the Biosphere Reserve of Can Gio

In addition, according to tourists, the organization of some fun activities in the tourist site (circus animals, crocodile fishing, selling animal food, etc.) is the activities that have the most impact on the

environment. When being interviewed directly about the tourist's reaction to the recreational activities using animals here, most (58%) expressed their disagreement (Fig.1).

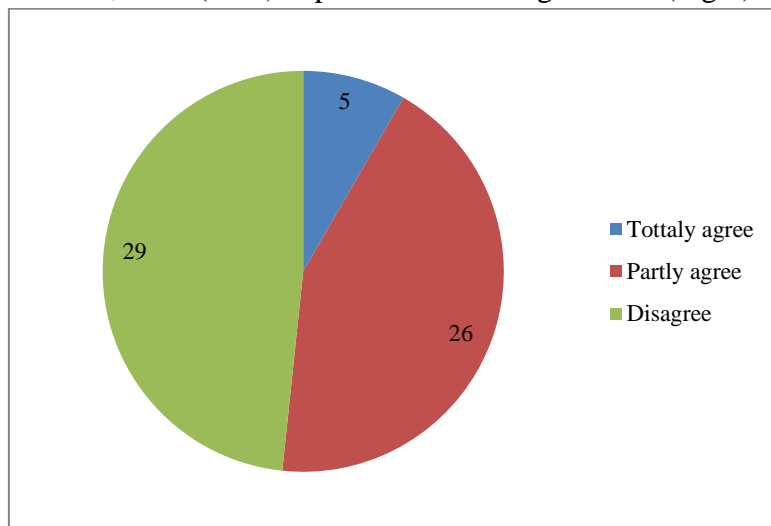


Fig.1. Respondents' opinion about entertainment activities here

The most obvious of the organizers selling food and encouraging tourists to feed the monkeys is that the monkeys become aggressive, the environment becomes unsanitary, there are signs of pollution caused by waste from food visitors.

However, when asked about the awareness of environmental protection, in particular the use of public trash here, most of respondents (66%) are not satisfied due to the lack of sanitation, the toilet is not clean (Fig 2). Most of respondents mentioned that the status of the sanitation is acceptable but not very good, while some chose good option. This affects more or less the environmental sanitation, landscape of the tourist site, as well as the living environment of animals and plants in the mangrove forest [4].

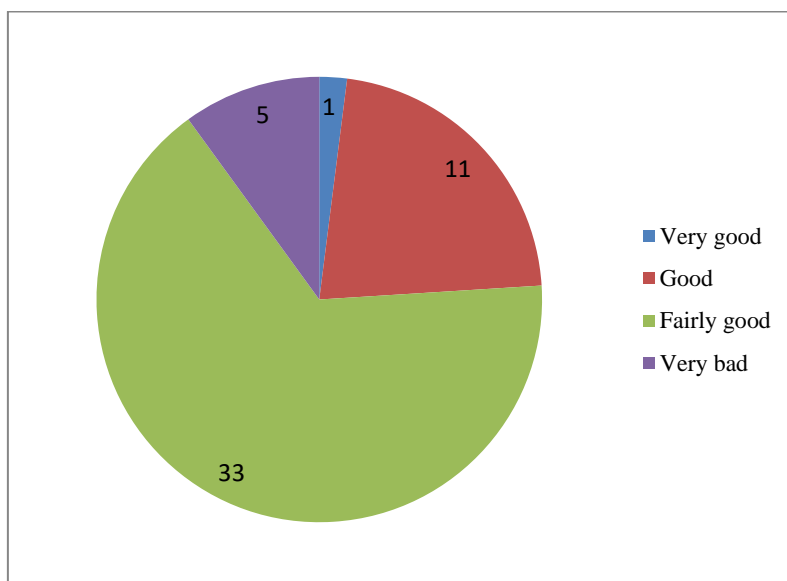


Fig.2. The status of environmental sanitation in tourist resorts

When asking visitors what information channel they would like to have to learn more about the ecosystem, most chose a guide (52%). The next is through museums (14%), Internet (30%) and local people (4%). In particular, there are some tourists who want to hear about the area by the staff of the

resort, because according to them, they can learn from the indigenous people about this unique ecological environment [8]. However, the actual survey shows that the number of tourist staff and guides who actually understand ecotourism is very small (Fig.3).

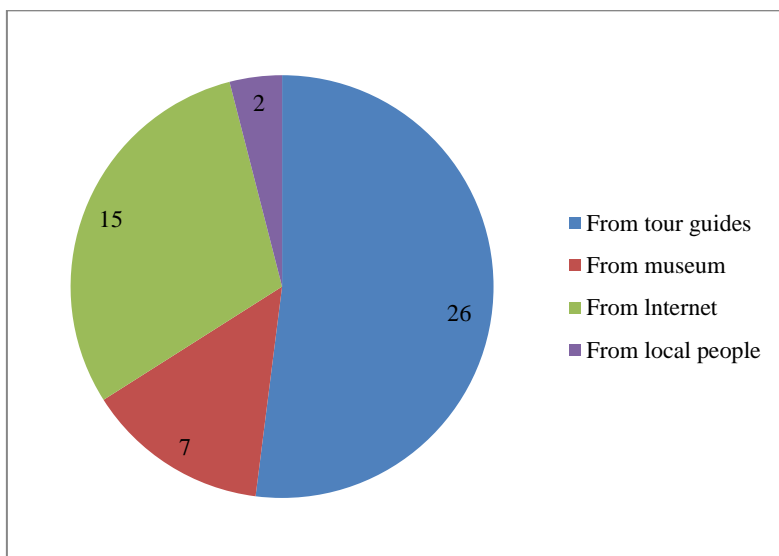


Fig.3. Sources of information about the Can Gio Biosphere Reserve that visitors can access

In fact, in the area of Can Gio tourist area, there is a small museum introducing the history of Can Gio exploration and displaying the specimens of some real, wild animals. However, according to visitors, the museum lacks appeal due to its rather narrow space [8]. Most visitors do not enter the museum because they are not interested or feel attractive due to the display in the museum or because they do not have a guide. In addition, leaflets and guide materials are very limited and only promote and introduce tourist sites rather than providing information about mangroves [9].



The museum of the Biosphere Reserve of Can Gio

Generally, the organization of sightseeing activities in combination with introduction of mangrove ecosystems and conservation education are more or less focused on tourist sites [6]. The ecotourism development here lacks a human resource with ecotourism expertise and expertise [10]. The use of the local workforce is in line with the principle of ensuring the interests of the community, but for

them to participate effectively in tourism it is necessary to equip them with more knowledge and skills [1].



The beautiful Can Gio forest

The organization of activities in the eco-tourism tourism site has not fully met the principles of limiting impacts on the natural environment. If there is no solution to redress these activities, the risk of losing the meaning of ecotourism and further harming the mangrove forests in particular and the natural ecosystems in general [6].

4 Some recommendations

The Biosphere Reserve of Can Gio mangrove forest has sufficient natural and human resources for ecotourism development [9]. However, in practice, even for tourism workers and tourists, understanding and properly implementing the principles of ecotourism is not always achieved [11]. Survey results show that tourism organizers have inadequate understanding of ecotourism, leading to construction of a number of recreational activities that are not suitable for conservation requirements and conservation education. in tourism sites in the archaeological landscape [7]. Activities to explain and guide tourists to visit and learn about mangroves are not really attractive and effective because the tour guides do not fully understand the importance of this activity. In addition, some tourist behaviors at tourist resorts have a negative impact on the flora and fauna here, they are not instructed to have a more environmentally friendly attitude [12]. The number of tourists who understand the characteristics and principles of ecotourism and actually want to participate in ecotourism is not much [3].

On the basis of the above analysis, there are a number of solutions for ecotourism need to be conducted in the right direction and more effectively [2]. To ensure the principles for ecotourism development need investment in human resources, a combination of recruiting people with the right expertise and having periodic additional training for existing human resources [5].

The explanation and guidance work should be invested, that is, we need to have further training in guiding skills, propaganda skills, awareness education for visitors to the speaker team at the point [1]. We need to enhance documents, make more efficient use of the space of museums and galleries to increase the provision of information about the ecosystem of the Biosphere Reserve for visitors [10]. Besides, we need to have appropriate guidance for visitors, it is advisable to invest more in mangrove introductory materials that are suitable for visitors of different ages [4].

The organization of sightseeing and entertainment for tourists, as well as the arrangement of equipment and means of transport in the tourist site should be calculated to avoid negative effects [5]. There should be signs that provide more complete information, instructions, and reminders. In addition, it is advisable to limit the number of visitors in some sightseeing areas, with guides to follow along the tour in this area to introduce and answer questions of visitors, helping guests to better understand the value of mangroves, thereby raising awareness of conservation for visitors [13].

At the same time, we also recommend the establishment of a functional department to monitor and manage the response to ecotourism requirements in Can Gio mangrove forest ecosystem in general, to make timely adjustments and fit [10]. The identification of risks from tourism itself is a practical and useful move to perfect a strategy for more effective and sustainable exploitation of ecotourism resources [6]. The biodiversity of Can Gio mangrove forest needs timely solutions to properly meet the requirements for the organization of ecotourism, to be worthy of being the ecotourism focus of the Southeast region.

It is necessary to invest heavily in products and services in addition to infrastructure [8]. For example, the form of buying local specialties from fishermen, producing and processing them on the spot is very popular, so it makes good use of this type, contributing to promoting local specialties; at the same time consuming agricultural products, seafood, increasing income for local people [2]. The tours should be designed reasonably, attractive with many contents, harmoniously combining water and land means bringing visitors to sights; expanding and improving the quality of accommodation services and services. Due to natural factors, Can Gio beach cannot bathe so resort tourism must create artificial services like Beaches, beaches, artificial lakes, etc.

5 Conclusion

Can Gio eco-tourism area is a great fantasy place for people to enjoy the weekend. Shine away from fevers of challenges to immerse yourself in nature and breathe unhealthy from the "green lungs" of Vietnam. To develop this area, we need to promote the tourism advantages of Can Gio mangrove forest with a green, clean - beautiful natural environment. In the tourism development strategy, Can Gio needs to be identified with branded tourism communication products, and large-scale tourism projects need more attention. In addition, human resources, service quality, diversification of tourism products and the environment should also be combined to create this into an ideal destination in Vietnam and in the world.

Conflict of interest

No conflict of interest is noted in the paper.

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