Developing tourism eco-friendly model in Thai-Chinese cultural community at Bang Luang community, Nakhon Pathom Province, Thailand

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Abstract: The research aims are to analyze the tourism potential; find out the tourism pattern and activity; develop alternative tourism route and create travel package for eco-tourism promotion. The research used both qualitative and quantitative methods from key persons in community including tourists. In-depth, focus group and questionnaire were used and be analyzed by contents analysis for qualitative and frequency, percentage, means for quantitative and they all descriptive explanation.

The study found that: considered area has high tourism potential, tourism patterns and activity were applied for cultural tourism resources and activities; local community can create alternative routes for tourism and links to the province; travel package has benefited for choices of tourists to find out tourism attractions and also related area.

1 Introduction

The tourism industry is vital to the economy, society, and culture both nationally and globally, especially in terms of the economy. Tourism creates jobs and income from the community level to the national level.

Pre-COVID-19 levels, which show an increase in market size of $808 billion U.S. dollars (USD), support the United Nations World Tourism Organization's prediction that 1.8 billion tourists will travel worldwide by 2030, or an average growth rate of 3.3%. This is a positive benefit to the community and society in the tourist area, as well as strengthening the community.

Bang Luang community is one of the oldest communities over 100 years old in Nakhon Pathom province, located on the edge of the Thachin River or Suphan Buri River. Most of the people are Thais of Chinese descent. The area is beautiful because of the architecture and atmosphere of the old market, which has been completely preserved, as well as the simple lifestyle of the rural people, including the traditions and local cultures that have blended between Thai and Chinese cultures. From these uniquenesses, tourists are interested in visiting and exploring the area.
interested and visit the Bang Luang community for tourism and cultural knowledge in the community.

According to a preliminary study of the Bang Luang community, it was found that Thai tourism, especially community tourism destinations, still lacks integration in the development of tourism models from local resources and identity, as well as creating new activities to create alternatives for tourists under the concept of developing tourist routes and tourism activities through the process of participation of tourism partners. In addition, the current situation during the epidemic, COVID-19, has spread around the world, affecting tourism throughout tourist destinations.

It mentioned that there was an analysis process for the source or upstream of tourism, such as tourism resources, including heritage, cultural, and social capital in tourist destinations, combined with the development of tourism activities based on the concept of creative tourism and increasing tourism options for tourists, together with the use of innovation and technology to develop a system for analyzing and preparing plots (inventory) [1-15].

From these problems, the research aims to study and model tourism potential development according to the tourism model with technological innovation to enhance creative tourism and alternative tourism in Bang Luang community tourist destinations and develop tourism models according to the potential of cultural community tourism sites. It emphasizes the development of tourism patterns or types based on community identity, resources, and environment in line with the current conditions in order to achieve tourism styles that match the real conditions of the area combined with the needs of tourists and the tourism market by using the dimensions of creative tourism development and alternative tourism to create tourism routes through creative tourism activities. And also, the study aims to increase access to information for making travel decisions with a variety of options according to tourism factors in order to both benefit and add value to communities and tourist attractions under a strong network of cooperation between academics (researchers), host communities (landlords), operators (implementers), and tourists.

Objectives

1) To analyze the potential of tourist attractions according to the tourism patterns of Bang Luang community tourist attractions.

2) To create tourism patterns and activities according to the tourism potential of the Bang Lauang community.

3) To develop a hybrid tourism integration model between provinces for creative and alternative tourism.

4) To create a travel package by using a tourism/travel data management platform based on tourism potential and patterns.

2  Literature review

Tourism is the journey of a person from one place to another for leisure or business with different purposes. They also added that to get involved for travelers, it is considered a trip to change the atmosphere and environment, such as traveling to visit tourist attractions to visit friends or relatives, or going for recreation or spending leisure time. In addition, tourism can be a kind of travel with friends for sporting activities, recreation, or studying the natural environment, including traveling to business meetings or attending It can be seen that tourism is a travel-related subject that has evolved from a mode of livelihood travel.
Therefore, the tourism business has expanded into a business and has grown into a tourism business industry.

Creating value and adding value through tourism

Added value creation refers to how to differentiate products in order to maximize customer satisfaction with products and services. It also links to create activities and tourism models for value creation and value added by emphasizing creating diverse activities and enhancing opportunities and incentives for trade development and also for tourism investment.

The Tourism Authority of Thailand (TAT) has focused on strengthening and pushing tourism to be a variety of quality tourist destinations providing valuable and impressive experiences. Moreover, value added can be mentioned, as one marketing promotion strategy is to increase tourism revenue growth for sustainability (Bramwell & Sharman, 2002).

The potential concept of tourism

The Tourism Authority of Thailand (1997), Sukhothai Thamathirath Open University (2009) and Choibamroong (2009) mentioned that the study of the tourism potential of any tourist attraction must consider various factors of the area classified as a tourist attraction, with five key elements used in determining the potential of tourist attractions, namely 1) accessibility, 2) attraction, 3) activity, and 5) accommodation.

Creative tourism

UNESCO defines creative tourism as tourism whose purpose is in line with the development guidelines for the community and sustainable tourism activities that are consistent with history in terms of learning and experimenting to acquire real experiences in the community. In addition, communities must be able to use creative tourism management as a tool to balance the changes that occur from tourism within the community and the benefits that the community will receive. In the form of remuneration, based on capitalism and the sustainability of community-based development, which is in line with tourism, creative tourism is a directed form toward an engaged and authentic experience, with participative learning in the arts, heritage, or special character of a place (Prueksapong, 2011).

The development of creative tourism aims not only to support the growth of tourists who are satisfied with traveling in search of different charms and cultures, but another obvious feature is encouraging residential communities to develop a sense of identity (Bangkok Business, 2009), which is one of the key factors that will contribute to the development of tourism in that community.

Trends and changes in technology in the tourism industry

Tourism 4.0 is a new era of tourism that integrates the use of innovation and technology to promote traditional tourism and virtual tourism. Likewise, communicating information to tourists anytime, anywhere through various forms of technology has tried to apply new technologies to the industry. Some good examples of how tourism and technology have been used for travel include booking accommodation websites and applications worldwide.

And Booking.com surveyed travelers in 2018 through Booking.com, the global leader in connecting travelers with a wide range of accommodation options and facilitating bookings of more than 1,500,000 rooms per day. Insights from over 128 million real guest reviews, combined with a survey of more than 19,000 travelers from 26 countries around the world, found that travelers in the 4.0 era expect and want from travel [16-34].
3 Research Methodology

This research is a combination of quantitative and qualitative research. The methodology is as follows:

*Qualitative Research*

The panel divided the qualitative research into three phases using in-depth interviews and focus group meetings. Details are as follows:

**Step 1: Study of the area context and tourism potential**

Conduct a survey of the study area in order to obtain both physical information and information on the social and cultural dimensions of the area.

Physical data relies on data analysis based on field data collection combined with geospatial data analysis to determine the overall physical condition of the area. by exploring the social and cultural dimensions of the area, the identity of the area, and studying and collecting data from local people to connect the development of the area in the past with the current conditions of the area and community.

The study uses the potential of tourist attractions according to the criteria of tourism factors (5As), namely: 1) accessibility 2) Tourist interest in tourist attractions (attractions) 3) Tourism activity in tourist attractions (activity) 4) Facilities in tourist attractions (amenity) and 5) Housing in tourist attractions and nearby areas (accommodation)

The target group includes those who are related to tourism in tourist attractions or related to tourism development in tourist destinations. Local groups Communities involved in tourism development representing education and non-local groups involved in tourism development.

Once the data from the assessment is obtained, the results are analyzed to group tourist attractions according to the type and style of tourism and to group them for in-depth study in each group in the next step.

**Step 2: Study of tourism patterns and activities**

Based on tourism background data, the researcher conducts an analysis of the potential of tourist attractions in the area to find out the actual tourism activities in the area according to the potential of actual tourism resources, together with the community, to analyze the actual tourism patterns in the community by conducting in-depth interviews and small group meetings in order to obtain tourism activities that meet the needs of tourists and create creative tourism patterns in the area.

**Step 3: Organize tourism activities**

In this step, the research organizes tourism activities on tourist routes according to the tourism model that develops routes in collaboration with local communities according to the type and style of tourism (alternative) and designs and develops tourist routes. The data comes from tourist behavior together with the availability of services in communities from small group meetings, leading to the creation of a travel data management platform by applying computer technology to manage data platform-oriented data to obtain a travel management system with AI to create important data to manage travel.

*Quantitative Research*

It is a study of the behavior of tourists visiting the area with questionnaires.

The research used a questionnaire to collect information from groups of tourists or visitors who have traveled to the area for tourism activities. The inquiry was based on the study of five factors in tourism and attraction from a sample of tourists who visited the area during the data collection period and then analyzed with percentage, average, and means statistics on tourism factors and tourism activities.
The research used triangulation to find the compilation accurate by examining the information in terms of location, time, and informant. In cases of conflicting research data, the researcher does not use such information for research purposes.

The research tests The Interviews Form from tourism expert fields checks the accuracy of the content by calculating the indexes of Item-Objective Congruence (IOC) of the question with a quality threshold of 0.50 or higher, and then uses the feedback and suggestions from experts to improve it (Bryman, A. 2008).

4 The results of the study

Tourism Potentials (5As)

1) Accessibility potential
   It was found that the access way to the area can be reached by private car along the route or by public transport vehicles, both passenger cars and vans, from Bangkok. And along the route, people's transportation is quite comfortable, and there are clear signs. It also has a fairly accurate navigation link (GPS).

2) Attraction potential
   It was found that the tourist attraction in the area is the outstanding two-story house building, which is an old architectural style in ancient Thai-Chinese style. It is called the wooden tents, which are two-story wooden houses planted next to each other. Tourists can also find interesting tourist attractions such as antique leather wigs, antique dentist shops, antique photo shops, and local specialties such as spring rolls, which resemble spring rolls but use mimosa as an ingredient, as well as shrines and shrines of the Mother Ruby (God) in the area.

3) Activity potential
   It was found that in the Bang Luang community, there are many activities for tourists to participate in, which are linked to the tourist attractions that exist in the area, such as watching the Thai-Chinese cultural lifestyle, tasting and buying food and souvenirs, a relaxing trip along the Tha Chin waterfront, and an outstanding activity is learning Chinese music. The activity includes studying the Museum of Chinese Music, for example.

4) Amenity potential
   It has been found that in the community there are plenty of tourism amenities, such as a car park, food and drink shops, and souvenir shops, as well as a cultural learning center and recreation area nearby the river.

5) Accommodation potential
   It was found that the Bang Luang community is an old community. It is located in a small community, so there are not many accommodations, but there are also accommodations nearby. In the future, the community is interested in providing homestay accommodation, depending on tourism activities and tourism characteristics.

Forms and activities of tourism according to the tourism potential of the Bang Luang community

The study of tourism patterns and activities according to the tourism potential of the community was collected by questionnaire from 400 tourists visiting Bang Luang community, with the following results:

Basic information about tourists

Collecting information from tourists visiting the Bang Luang community can explain the basic information of tourists as follows:

It was found that the majority of respondents were female, more than males (62.25%) and males (37.5%).
The majority of tourists are aged 18–25 years (22.25 percent), followed by 56–65 years old (22.00 percent), 46–55 (18.75 percent), 26–35 (14.00 percent), 36–45 (11.75 percent), and 66 years and over (11.25 percent).

Most tourists were students (58.75%); self-employed (16.50%); agriculture/fisheries accounted for 6%; civil servants/state enterprises accounted for 5.25%; unemployed/housewives accounted for 1.75%; and general employment accounted for 0.75%.

The majority of residents are residents of the Central region (45.00%), followed by the South (23.75%), the Northeast (20.25%), the West (5.75%), the East (3.75%), and the North (1.50%).

The reason for traveling for most tourists is to visit relatives as much as possible. 50.5%, followed by leisure (38.50%) and transiters (6.25%).

Most of them know about the attractions on social media (Facebook, Instagram, Line, WeChat, etc.): Twister Radio/TV (23.75%), travel magazines (20.25%), web channels (4.75%), travel agencies (3.75%), family/agencies (1.50%), and tourism offices (1.50%).

The duration of the trip to this tourist attraction is most likely one day (58.25%), followed by half a day (40.25%), and more than one day (1.5%).

Each trip to the community cost approximately 1,501–3,000 baht, accounting for 52.25%, followed by less than 1,500 baht (46.75%), and more than 3,000 baht (1%).

Tourists' satisfaction with their visit to the Bang Luang community

Information on tourists' satisfaction with their visit to the Bang Luang community can be explained as shown in Tab. 1.

**Table 1:** Satisfaction level of tourists visiting Bang Luang community

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<th>Accessibility</th>
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<td>The easy accessing</td>
<td>4.62</td>
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<td>Clear of the sign</td>
<td>4.51</td>
<td>0.50</td>
<td>Very high</td>
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<td>Variety of accessing to the area</td>
<td>4.48</td>
<td>0.47</td>
<td>high</td>
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<td>View from bout sites of the route</td>
<td>4.44</td>
<td>0.49</td>
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<td>Safety of the accessing</td>
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<tr>
<td>Total</td>
<td>4.49</td>
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Tab. 1 shows that the overall level of tourist satisfaction in terms of access to tourist attractions is very high (=4.49).

**Satisfaction with tourist attractions**

The level of satisfaction with tourist attractions towards the visit of the Bang Luang community. This can be explained in Tab. 2.

**Table 2:** Satisfaction level with tourist attractions
From Tab. 2, the level of satisfaction of tourists in terms of tourist attractions, it was found that overall tourists were satisfied at a high level (=3.96). When considering each issue, it was found that all tourist issues had a high level of satisfaction in all issues.

**Satisfaction with alternative tourism destinations**

The level of satisfaction with alternative tourist attractions towards visiting the Bang Luang community can be described as shown in Tab. 3.

**Table 3: Satisfaction levels for alternative tourism destinations**

<table>
<thead>
<tr>
<th>Alternative tourism resource and activity</th>
<th>Satisfaction level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tourism data for alternative tourism</td>
<td>3.75</td>
</tr>
<tr>
<td>Role of local people to alternative tourism</td>
<td>4.01</td>
</tr>
<tr>
<td>Attraction can be linked to related tourism areas</td>
<td>3.85</td>
</tr>
<tr>
<td>Ability of alternative tourism in the area</td>
<td>3.79</td>
</tr>
<tr>
<td>Total</td>
<td>3.83</td>
</tr>
</tbody>
</table>

From Tab. 3, the level of satisfaction of tourists in terms of alternative tourism showed that overall, tourists were very satisfied (=3.83). Tourists have a high level of satisfaction with all issues, and when sorting issues by average score in descending order, they can be sorted.

**A provincial hybrid tourism model for creatively alternative tourism**

It was found that 31.25% of tourists were most interested in visiting the Khlong Maha Sawat community, followed by Lord Phra Pathom Chedi Raja Woramahawiharaya (16.75%), Don Wai Floating Market (14.5%), the elephant showground, and Sam Phran Crocodile Farm (8.5%).

The above information shows that tourists are interested in visiting the Khlong Mahasawat community. Therefore, a study has resulted in a study on the potential and readiness of the Khlong Mahasawat community to develop a hybrid form of tourism integration between tourist attractions in Nakhon Pathom province in order to create alternative creative tourism.

**Creating a Travel Package by Using a Tourism/Travel Data Management Platform from Tourism Potential and Model**

The researcher developed and applied the Tourism/Travel Data Management Platform to facilitate the tourism of tourists through 3D learning materials with virtual interaction using augmented reality technology. The tourism route of the Bang Luang market community area and linked areas, such as the Khlong Mahasawat community, which is the highlight of Nakhon Pathom province, can serve as a model for stimulating the community economy and motivating tourists to feel like traveling.

After the tourism situation improves and generates sustainable income for people in the community, this technology can meet the needs of today's tourists very well. It is also easy to access information about goldsmiths, and this information will be most useful in terms of promoting tourism routes and as a tool for disseminating information. It creates the image of tourism. The benefits of today's technology have become more tangible, and the design of tourism styles is available in three formats: half-day, full-day, overnight, etc.
5 Conclusion

Tourist attraction potential according to the tourism pattern of the Bang Luang community

Bang Luang Community is a Thai-Chinese cultural community with full tourism potential. The five issues are considered for tourism patterns, including accessibility potential, accommodation potential, tourism activity potential, and tourism attraction potential. It was found that the community has a long history, has formed community-based tourism based on a blend of Thai and Chinese cultures, and continues to preserve the culture and environment for tourism.

Forms and activities of tourism according to the tourism potential of the Bang Luang community

It was found that most tourists who visited the Bang Luang community were more female than male. The average age is 18–25 years, mostly students. They came from the central region, which is for the purpose of returning to visit relatives and for recreation, often by private car. Most of them know about the attraction of social media (Facebook, Instagram, Line, WeChat, etc.). Twister It takes about 1 day to visit and costs, on average, 1,500 to 3,000 baht.

In terms of satisfaction, tourists were satisfied with the convenient route from the main road to tourist attractions. The route from the main road to the tourist attraction was clearly marked, as were the overall basic facilities necessary for tourists, whether it was the number of toilets, cleanliness, or hygiene. There were enough bins for trash and cans, convenient, hygienic, and sortable garbage disposal, and parking was adequate. The area was neat and clear, not far from tourist spots, and it has also been satisfied by tourists in terms of accommodation. Tourists were satisfied with the availability of accommodation nearby that harmonizes with the local environment and nearby tourist attractions. And most visitors were satisfied that the Bang Luang community is unique in its tourism resources as an ancient community located along the river and interested in the tourist activities that appear in the area.

Provincial hybrid tourism model for creative alternative tourism

From the study of the interests and needs of tourists and visitors who come to visit the Bang Luang community, they were interested in both natural and cultural attractions. It was found that tourists were most interested in continuing to travel to the Khlong Mahasawat community as it is a natural area with organic agricultural activities. Moreover, from the Maha Sawat, they could go visit lotus fields and enjoy the One Tambon, One Product (OTOP) distribution center, or agricultural housewives processing agricultural products. Visiting an orchid farm and taking a boat trip along the canal. They mentioned that all activities have the potential to attract and promote learning and provide a good tourism experience for tourists.

Travel Package by using the Tourism/Travel Data Management Platform from the Tourism Potential and Model

From the study of the tourism potential of the Bang Luang market community area, the research has developed and applied the Tourism/Travel Data Management Platform to facilitate the tourism of tourists through 3D interactive learning materials using augmented reality (AR) technology by using an application called ROAR (Augmented Reality App). This can create virtual reality images that will contribute to interesting activities and tourism patterns. This technology can meet the needs of today's tourists very well. It is also easy to access information about goldsmiths, and this information will be most useful in terms of promoting tourism routes and as a tool for disseminating information. It creates the image of tourism. The benefits of today's technology are more tangible.
This is to lead to the upgrading of the local economy through three types of tourism routes: 1) a half-day program in the Bang Luang community area, which is suitable for tourists with little or limited time; 2) a full-day program. For tourists who are interested in the Bang Luang community area and want to learn and absorb the atmosphere of the old community; and 3) a 2-day, 1-night program that has a tourism program that connects Bang Luang community to Khlong Mahasawat community.

6 Research discussion

The Bang Luang community itself has sufficient potential to become a tourist attraction that has been satisfied by tourists because it is a unique tourist attraction. Activities at tourist attractions are interesting, easy, and convenient to access. In addition, there are enough facilities to meet the demand, and there is enough accommodation in the surrounding area to meet the needs of tourists, which is in line with the studies of Chuaybamrung (2011) and Dickman (2016).

As explained, there are five important factors that promote tourism:
1) access to tourist attractions has a suitable infrastructure system that will allow tourists to arrive at that destination or attraction,
2) accommodation to accommodate tourists (accommodation) who want to stay overnight,
3) tourist attractions
4) activities and recreational activities, all of which are experiences that remain in the memory of tourists, and such activities often contribute to income distribution.
5) All miscellaneous services provided to tourists (ancillary), such as shops, souvenir shops, toilets, etc., including communities linked to the Khlong Mahasawat community, also received attention. This is due to the physical difference between the two areas.

There were enough convenient, hygienic, and sortable bins for garbage disposal, and parking was adequate. It was orderly, clear, not far from tourist spots, and has a variety of tourism activities, which travelers were interested in in the form of half-day, full-day, two-day, and two-day night tourism that blended with other or similar tourism sources. According to the studies of Noppakijkamchorn (2017) and Lertpipatananont (2015), the behavior of tourists who want to participate in activities that generate knowledge to understand the area Palmer & Chuamuangphan (2017).

In addition, the application of AR technology to tourism can also help make tourism activities more interesting because AR is a technology that blends the real environment with virtual objects at the same time. Virtual objects can be images, audio, video clips, or text to present or interact with users, which requires processing via mobile phones, tablets, computers, or other devices, depending on the design, to provide tourists with content from digital media from various forms of multimedia systems, which can add unlimited content and can communicate with a variety of researchers. Srisuwong (2020) and Limpinan (2019), who have studied the promotion of tourist attractions in Maha Sarakham province using virtual reality technology.

It was found that the results of the assessment of satisfaction from tourists using virtual reality technology as part of tourism were at the highest level. In addition, the presentation of information in the form of books or electronic media can attract more attention from tourists than reading ordinary books (Kongkakool & Narint, 2018). In addition, tourists gain knowledge and enjoyment by using routes that have been redesigned according to the potential of the tourist attraction, in particular to benefit from public relations and tourism promotion (Tippeng et al., 2022) and Chuaybamrung (2011).
7 Research suggestions

1) In the next study, guidelines should be studied to encourage the attraction of tourists of other age groups, not just teenagers and students, to promote tourism in the area.

2) The knowledge and local wisdom of the community should be elevated and adapted to be more unique and a tourism hallmark.

3) The Bang Luang community should be promoted and encouraged to make local youth aware of and appreciate the importance of their resources and wisdom in order to make the community more known to tourists.

4) The next study should study the guidelines for knowledge organization or knowledge management in the Bang Luang community in order to obtain a systematic knowledge system and pass it on to the next generation, who will be responsible for tourism development.

5) There should be further studies on connecting other tourist attractions in both the province and neighboring provinces in order to create a working link between communities and expand tourism opportunities to other areas.

References


2018

2018


2017


2020

2020


27. Sukhothai Thamathirath Open University. Tourism Resources in Thailand, Unit1-8. Sukhothai Thamathirath Open University
2009


29. S. Tippeng, K. Peincharoen, N. Sangprasert, S. Makhon & R. Yurapan. The research and tourism route development on wetland and lake of Sonkla by Using AR for Community Development. Songkla Province
2022


31. Tourism Authority of Thailand. Future of Thai Tourism. Journal of Thai Tourism, 46)
1, 21-27
2005

