# Guidelines for Creative Ecotourism Management of Bang Pu Community, Pattani Province, Thailand

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**Abstract:** The objectives of this research were to 1) to study and analyze the potential of ecotourism resources of Bang Pu community, Pattani Province, 2) to study the needs of stakeholders to the creative ecotourism management of Bang Pu community, Pattani Province, 3) to study behavior and the needs of the Thai eco-tourists towards the ecotourism management model, and 4) to develop products and creative ecotourism activities of the Bang Pu community, Pattani Province.This mixed methods research applied the concept of ecotourism, creative tourism, development of tourism resources, participatory development, and tourism decisions as the research framework. The research area was Bang Pu district, Pattani province. The sample group consisted of 385 Thai ecotourists who were selected by the convenience sampling method. The key informants were 50 local stakeholders who were selected by the purposive sampling and snowball sampling methods. An in-depth interview and participant observation were used to collect the data. There were 5 types of research instruments which are: 1) questionnaires 2) the resource check list by using SWOT Analysis. 3) Diversity Index Survey, and 4) Researcher Interview Form. 5) The quantitative data were analyzed by basic statistics such as Percentage, Means, Standard Deviation, and Inferential Statistics such as T-Test, One-Way Analysis of Variance (ANOVA), Chi Square Test. The qualitative data were analyzed with the content analysis and descriptive writing methods. The results illustrated that the potential ecotourism resources included mullet, scats, eeltail catfish, bass, stingray, egret, Cormorant, Asian openbill, kingfisher, and Brahminy kite. Furthermore, the first demand of the local stakeholders for development wasthe provision of tourism activities and stations to be consistent with Islamic principles, followed by tourism management and safety. The results also showed that Thai tourists had a high level of demand for ecotourism. Guidelines for the creative ecotourism management of Bang Pu Community, Pattani Province based on the results of the analysis of the potential resources of creative ecotourism of Bangpu Community, Pattani Province. It is a creative ecotourism destination. Therefore, the researcher has recommendations for the development of 7 areas, which are as follows, 1) Tourism locations and attractions 2) Accessibility 3) Accommodation 4)Facilities 5)Tourism activities 6) Management 7) Aspect of community participation.
**Keywords:** Guidelines, Creative, Ecotourism, Management,Bang Pu Community, Pattani Province

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## 1.　　　Introduction

At present, the tourism industry is growing up. It plays an important role in the world's economy and society and being an important source of income, bringing foreign currency, creating jobs, and spreading prosperity to different countries. Tourism is an important economic and social aspect. Tourism industry plays an important role in driving the region's economy, including Thailand. The United Nations World Tourism Organization (UNWTO) predicted that by 2020 there will be 1.6 billion international tourists. The regions that should be tourism destinations and popular for tourists are East Asia, Asia Pacific and Southeast Asia. The Asia-Pacific region is estimated to have 416 million tourists, or a quarter of the global number of tourists [1]. In 2020, there will be more than 45 million foreign tourists in Thailand from the prediction, and in 2030, there will be 67 million foreign tourists (Ministry of Tourism and Sports, 2018) [2]. At present, Thailand is one of the world's major travel hubs and being the major travel hubs of the Asian region. It plays an important role in linking tourism promotion of the ASEAN region at the bilateral and multilateral levels. The government focused on the tourism industry that it had stimulated and built confidence, and attracted new investments from foreign investors who made Thailand as a key regional base to enter into the market in the ASEAN Economic Community with more than 620 million consumers.

Travelers would travel in 2020, and the most popular destination remains in Asia, so it demonstrated the potential of tourist destinations in the ASEAN region according to the statistics of the number of tourists shown, countries with tourism potential set tourism development plans as a national agend to make a master plan for setting tourism directions with the goal of attracting tourists to their own country.Malaysia is one of the world's leading countries in the tourism industry, generating income from foreign tourists. It has a vision that "to triple the GNP from the tourism industry by 2020 to promote per capita income growth" and employment rates. Thailand aims to develop tourism to be a popular tourist destination or Preferred Destination with the vision defined that "Thailand is a quality tourist destination with the ability to compete in the world-class tourism. It can generate income and distribute income with regard to fairness, balance and sustainability" [3] Tourism development in

Thailand is not the only tourism development in the country, but the policy of the country also promotes the development of multinational destination and offers international travel routes in the connecting area as well as presenting its position as a regional tourism center and promote investment in Thai entrepreneurs and Thai laborers to the regional level [3].It is joint venture by doing markets together or developing trade and investment in border areas and border tourism, including the link area. For the part of Thailand that is an area linked to Malaysia, according to the announcement of the Cabinet which had passed the resolution on October 4, 2016, it was approved for the Model City Project's principle "Stable, Prosperous and Sustainable Triangle" (2017-2020). The Office of the National Economic and Social Development Board in collaboration with the Southern Border Provinces Administrative Center (OCT), organized a model town project "Stable, prosperous and sustainable triangle" to develop economic and social development for 3 districts in the southern border provinces, such as Pattani Province, to be a model city, the Agricultural Industry and Integrated Development, Narathiwat Province, as a model city, and the Sustainable Development City [4]

Pattani Province is one of the five southernmost provinces located on the eastern seaboard of the southernmost, and it is adjacent to the South China Sea. It is about 1,055 kilometers from Bangkok by car. Currently, the tourism of Pattani province has a continuously increasing number of tourists and income from tourism. Tourism is becoming more and more popular with tourists due to its uniqueness Complete with historical and cultural sites such as KrueSae Mosque, Chao Mae Lim KoNiao Cemetery, Wat Chang Temple, etc., and abundant natural resources and food for those who love the atmosphere of the sandy beach, the sea, the river, the canal, the cave, as well as the unchanged way of life.Pattani is a prosperous trading port from the past and continued to grow for a long time until today by accumulating historical stories as a legacy in many tourist attractions. Visiting the southern border provinces Pattani City is; therefore, counted as having manyl kinds of historical land, nature, and way of life. It is a fusion of all religions to coexist. The service is also provided by a good host according to the motto of Pattani Province that has been around for a long time, saying it as "The beautiful city of three cultures with excellent Halal Center and people embrace faith and natural beauty, Pattani, the happy Southern Region" One of the communities with tourism resources as well as the uniqueness of Pattani's strong and complete community lifestyle is Bang Pu Village, a 100 percent indigenous Muslim community located right next to the beach.There is a famous marine life crab, Bang Pu house, has a fertile general condition. There are mangrove forests along the entire length of Ban Bang Pu area that is suitable for many occupations and appropriate for managing natural tourism and ecotourism. There is a mangrove forest tourist attraction that has a complete ecosystem that it is able to develop a variety of important tourism activities. For the result of the study, the researcher has received broad benefits that can be further applied to ecotourism based on biodiversity and Local wisdom for economic development of Thai-Malaysian border tourism in Bang Pu area Pattani province, along with the development of the linked tourism route as a guideline for the management, marketing promotion, and development of the quality of tourist attractions, including benefits for tourists who will receive services that meet the needs of tourists.I have learned a great ecotourism experience from tourism, including the value of the tour compared to the lost expenses.

## 2.     Research Objectives

The objectives of this research article were 1) to study and analyze the potential of ecotourism resources of Bang Pu community, Pattani Province, 2) to study the needs of stakeholders to the creative ecotourism management of Bang Pu community, Pattani Province, 3) to study behavior and the needs of the Thai eco-tourists towards the ecotourism management model, and 4) to develop products and creative ecotourism activities of the Bang Pu community, Pattani Province.

## 3.     Research Methods

### Research Design

This research is a combined research. The research area is Bang Pu community, PattaniProvince, Thailand.The population is the Thai ecotourists who come to do ecotourism activities in the ecotourism sites of Thailand. The sample group is 385 eco-tourists using a probability-based selection to do simple random sampling. The researcher determined the sample size using the Cochran population unknown formula (1953).The reliable rate of selecting the sample group was 95%, and the determining acceptable errors were not more than 5%. For the key informants, there were 50 Key Informants as stakeholders involved in tourism management on Creative Ecology of Bang Pu Community Pattani Province [5], and they are: 1) Government personnel responsible for the supervision and support of tourism and tourism of Pattani Province, 2) People who play a role in the area are Toh-Imam, community leader, and villager philosopher, 3) villagers in Bang Pu community area, 4) business operators supporting ecotourism in the province, and 5) eco-tourists using the selection method for totally(5 people by using specific method and a chain sample selection.There were 5 types of research instruments which are: 1) questionnaires used to study tourists' behavior and needs to be in accordance with the concept of ecotourism, 2) the resource list check form to study about natural resources, cultural resource, Expo resources, activity resources,

service resources, and assessment of quality, uniqueness, and power of attraction. It was analyzed by using SWOT Analysis as the concept of [6], 3) Diversity Index Survey, and 4) Researcher Interview Form. The results from the study of documents, concepts, principles and theories related to the ecotourism development components come as a guideline for creating an interview. The quantitative data were analyzed by basic statistics such as Percentage, Means, Standard Deviation, and Inferential Statistics such as T-Test [7] One-Way Analysis of Variance (ANOVA), Chi Square Test, an independent T -test, and double comparison. For the qualitative data analysis, research papers were used to analyze and synthesize information and then use the information on descriptive lectures as well as using scientific data to analyze the Diversity Index according to Shannon's Index method, and use the Evenness Index according to the Pielou index  method to assess the Ecological fertility based on the relationship between living organisms and water quality.The researchers conducted a qualitative and quantitative research process from January and September 2018.

## 4.    Research Results

**1.Results of the study and analysis of the potential of ecotourism resources of the Bang Pu Community, Pattani Province**

1.1 The results of ecotourism survey of Bang Pu Community, Pattani Province

**Table 1**Remarkable nature,Remarkable culture, Significant expo, tradition, and events, Remarkable activities, Services

| The results of ecotourism survey of Bang Pu Community, Pattani Province | |
|---|---|
| **1) Remarkable nature** | |
| Interesting natural attractions | Tree Tunnel, Ancient Forest, Bird Island, Pattani Bay, I Love Bangpu Viewpoint |
| Plants | White Bean - Black Bean Group, Black Taboon Tree Group, Sea astragalus Group, mangrove, Lumnitzera racemosa, white Sea Holly, Klu, Samae khao, Pho thale, Prong Thale, Pak Bia Talay from Lamphu, Lamphaen |
| Water animal | Kee Tang (Takrab) Fish, Krabok Fish, Sea Catfish, Sea bass, ray crab, black crab, clam (Lo-gae) |
| Poultry | Egrets, cormorants, White-breasted Waterhen, Bubulcus ibis, little egret, pond heron, large egrets, tailbills, group of red-nosed kingfishers and ducks. |
| **2) Remarkable culture** | |
| Cultural heritage | Ancient southern Javanese civilization house in Muslim style, plaited bamboo-striped wall, wood carving group, Batik Group Hakkumuslimin Mosque, Taawun Mosque,(Middle Eastern architecture, Dekehulu, and Cila. |
| Religious heritage | Mass hadith is a part of goodness, fasting, and prayer. |
| Local food heritage | Bird's nest, herbal drink, Madu Ja Dong dessert, Ba Pae Ubi dessert, Spicy Seaweed, Budu, beef sausage |
| **3) Significant expo, tradition, and events** | |
| Traditional heritage | Azuro Day, Maulik event, Fasting month, Harirayo Day, Hadith, marriage tradition |
| **4) Remarkable activities** | |
| Recreational activities | Finding shellfish (Lo Kae), ship cruising to the mangrove forest, study the coastal ecosystem, study the traditional fisherman's way of life, cruising along Pattani Bay, learn to make Pom Nang seaweed, natural black crab raising activity, Mangrove Root Therapy for Foot Massage, and relaxing activities at the bamboo garden under the shadow of the mangrove, Ancient Forest Touring, fish feeding activity in the cage, local cooking activities, fishing trip (at night), and cycling to see the way of the community, etc. |
| Facilities | Boat transfer service, Shuttle service, Bicycle service |
| **5) Services** | |
| Various services related to tourists supporting | Homestay, mosque, gas station, school, district/village health promotion hospital, Sub-Police Station, Sub-District Post office, and Restaurant |

1.2  For the results of natural resource analysis, the top 5 plants, birds and fish potential suitable for promoting ecotourism of Bang Pu community, Pattani Provinces are as shown in Table 2 as follows.

**Table** 2 natural resource analysis, the top 5 plants

| No. | Natural resources (plants, trees) | Natural resources (birds) | Natural resources (fish) |
|---|---|---|---|
| 1 | Scientific name : Acanthus ebracteatus Vahl. Family name : ACANTHACEAE | Scientific name: Mullet Family: Mugilidae | Common name: egret Scientific name: Ciconiiformes |
| 2 | Scientific name : Avicennia marina (Forssk.) Vierh. Family name : ACANTHACEAE | Scientific name: scats Family: Scatophagidae | Common name: Cormorant Scientific name: Phalacrocoracidae |
| 3 | Scientific name : Sonneratia caseolaris (L.) Engl. Family name : LYTRACEAE | Scientific name: eeltail catfishes/ striped sea catfish Family: Siluriformes | Common name: Asian openbill Scientific name: Ciconiidae |
| 4 | Scientific name : Pluchea indica (L.) Less. Family name : Asteraceae | Scientific name: bass/perch Family: Perciformes | Common name: kingfisher Scientific name: Coraciiformes |
| 5 | Scientific name : Rhizophora apiculata Blume Family name : RHIZOPHORACEAE | Scientific name: stingray Family: Elasmobranchii | Common name: brahminy kite Scientific name: Accipitridae |

1.3The results of Ecotourism Management of Bang Pu Community, Pattani Province are as shown in Table 3 as follows.

**Table 3 S**WOT Analysis Results

| Strengths | Weaknesses |
|---|---|
| 1. The community has a complete mangrove forest ecosystem. 2. The community has a variety of tourism resources: place man-made, culture, traditions, way of life, and nature. 3. Community-based tourism management based on the identity of the community. 4. There are tourism activities that allow tourists to participate. 5. There is a diversity of areas in the community in the food chain. 6. People in the community are good hosts and friendly to tourists 7. Community leaders have strength in community-based tourism management. | 1. History, stories, and interpretations of some attractions are not the same, lack of unity 2. Lack of management of the entire tourism supply chain, tourist attraction, tourism activities, accommodation, restaurants, transportation and travel activities 3. Lack of common areas for tourism activities or welcoming large groups of tourists. 4. Some tourism products lack value added and some community products are in high demand Bbt less productive, lack of market in some points. 5. Lack of supervision of community environmental health system. 6. The number of homestays in the area is insufficient and some parts have not been certified to the standard. 7. Some activities still lack the safety of tourist services. |
| **Opportunities** | **Threats** |
| 1. The number of tourists from ecotourism has been increasing. 2. The government encourages communities to create community-based tourism. 3. Travel agencies help communities to market. 4. Community partners to support/promote tourism, provincial culture, schools in the area, provincial tourism and sports areas, and District Office. 4.Social media makes it easier to reach tourist groups. 5. There is a network of community-based tourism in the south and community-based tourism of the country to support/promote. | 1. Lack of budget for infrastructure development. 2. The image of the area is not a safe image. 3. Lack of integration to work in the area, training, educating, monitoring and evaluating the performance of various projects of government agencies, and the private sector to educate the community. 4. The moving of youths who are at working ages to work in different areas or provinces. |

**2. The results of the study of stakeholders' needs for creative ecotourism management of Bang Pu community, Pattani Province**

2.1 Tourism and safety Stakeholders want the community to improve the safety system for life and property by allowing the network of entrepreneurs to participate in the safety inspection in the community on the day the tourists travel to stay in the community. The Community Executive Committee will develop a system for waste classification according to the type by coordinating with Bang Pu Subdistrict Administrative Organization to request trash bins. The community will rule out homestay operators who are a member of the club's membership network to install a wastewater treatment system before draining into rivers, canals, and the Pattani Sea.

2.2 Accessibility The stakeholders share the same opinion that the community should be welcoming, friendly, and doing tour guide. The community will improve the signboards in the community to be clearer and easier to understand, and the signs meaning should be more clearly. The researcher and the community administration committee will use the information of various learning bases to create 3 different meaining signs at the Bang Pu learning base for 3 bases: 1) learn about the plants in Bangpu, 2) learn about Bangpu sea animal, and 3) learn about birds at Bang Pu. These should be sticked to each learning base to add value to make it more interesting and another important issue is the development of accessibility areas. Nowadays, there is a road that can easily access the community through both small cars and large vehicles to the Bang Pu community, but there is no public bus service available. Therefore, it is considered an obstacle to the tourists who travel themselves. However, tourists can contact the community to pick them up at the bus terminal or Hat Yai airport, or they can rent a van from Hat Yai.

2.3 Accommodation, food and drinks, and souvenirs Stakeholders recommend the Bang Pu Tourism Club to develop products and souvenirs to be more unique among Muslims and always develop products to have quality, clean, fresh as well as developing packaging to be modern and add value to the products in the community. The community must improve cleanliness and fresh food. The menu of food and drink to have a more local identity. More and more products from the community are used in cooking for tourists to reduce the purchase of raw materials outside the community. In the future, the community has an idea to do a vegetable planting project to emphasize participation for the villagers in the community to grow vegetables within the community, so that it can be used to cook food for tourists and to make seafood. There should be more seafood than beef because some tourists do not consume beef.

2.4 Tourism activities and learning bases The stakeholders have the opinion that the community should develop a learning center that reflects the way of life of the Bang Pu community to be more interesting, with the development of 3 learning bases at Bang Pu: 1) Plants base for Bang Pu people, 2) The sea animals of Bang Pu sea, 3) Learn about birds in Bang Pu. The Bang Pu Tourism Community has expressed its readiness to develop more facilities to support tourism such as room quality, vessel quality, and safety matters such as developing bicycle routes in the community and meaning signs, etc.

**3. The results of a study of behavior and needs of Thai Eco-tourists on the ecotourism management model of the total 385 persons** in the sample group is found that, the majority of the sample group were females for 225 persons (58.44%) and 160 males (41.56%). For the age of the sample, the majority were in the age range of 21-38 years (Gen Y ) for 196 cases (50.91%), age 39-53 years (Gen X) for 111 cases (28.83%), age under 20 years (Gen Z) for 62 cases (4.16%), and sample group of the elderly with over 54 years old (Gen B) for 16 cases (4.16 percent).

For the educational level of the sample, it was found that most of them studied at the bachelor's degree, totally 199 cases (51.69%). Most of the sample group worked as employees of private companies (34.81%). For the domicile of the sample, it was found that the majority of the sample were in Bangkok and metropolitan areas (NakhonPathom, Nonthaburi, PathumThani, SamutPrakan and SamutSakhon), and it counted as number 1 in the rank (40.52%). For the frequency of travel in one year, it was found that most of the sample group traveled more than 5 times (31.69%). For the average salary, the majority was more than 35,001 baht. For the traveling characteristics of the sample group, it was found that most of the group traveled with their families (36.62%).

For the types of activities that the sample group was interested in ecotourism, it was found that that most of them were interested in leisure and dining activities (54.50%), followed by natural scenery activities in a calm atmosphere (47.90%), waterfalls (46.40%), camping activities (31.70%), nature photography activities, video tapes, and audio tapes (27.50%), Canoeing activities/kayaks/dinghy/ sailing activities (24.30%), nature trail cycling activities (22.80%), nature study cruises (% 21.60), rubber rafting/bamboo rafting (18.60%), educational activities/caving activities (17.70%), sky and astronomy studies (17.10%), nature study activities (15.90%), climbing/hiking activities (100% 13.20 percent), Scuba diving activities (12 percent), bird watching activities (8.10 percent), windsurfing activities (7.50 percent), and small glider activities (7.50 percent).

The analysis of the relationship between the age of the tourist sample and the tourism activity component and tourism demand of the Thai Eco-tourists will use a cross-tab analysis method to identify the frequency of the behavior of the tourists sample group by using the data validation method to find the correlation through the Chi Square Test and the One-Way ANOVA analysis to find the relationship between the age of the sample group and the tourism activity component as well as the tourism needs of the Thai eco-tourists.The data analysis result is as follow:

1) The relationship between the age of the sample group and the component of tourism activity was found that the attractiveness of the sample group in each age range has no differences with statistically significant by having F-test equals to 2.178, 1.385, 1.855, 2.299, 0.837, 1.022, and0.707, respectively, and Sig equals to 0.090, 0.247, 0.137, 0.077, 0.474, 0.383, and0.548, respectively.

2) The relationship between the age of the sample and the accessibility component of the tourist attraction was found that the sample group in each age range has no differences with statistically significant by having F-test equals to 1.763, 0.477, 0.271, and 2.189, respectively, and  Sig equals to 0.154, 0.699, 0.284 and 0.089, respectively.

3) The relationship between the age of the sample and the composition of the facilities was found that, in terms of having ATMs, restaurants, tourist souvenir shops, are adequate to accommodate tourists, the sample group in each age range has different average idea with statistically significant by having F-test equals to 0.787, 1.882, 3.120, and 0.383, respectively, andSig equals to 0.502, 0.132, 0.026**, and 0.765, respectively.

4) The relationship between the age of the sample and the component of accommodation was found that the sample group in each age range has no differences with statistically significant by having F-test equals to 1.429, 1.688, .243, and 0.947, respectively, and Sig equals to 0.234, 0.169, 0.867, and 0.418, respectively.

5) The relationship between the age of the sample and the component of tourism activities was found that the sample group in each age range has no differences with statistically significant by having F-test equals to 1.248, 1.529, 1.222, 1.516, and 0.357, respectively, and Sig equals to 0.292, 0.207, 0.301, 0.210 and 0.784, respectively,are as shown in Table 4 as follows.

**Table 4** The Analysis of the Relationship between the Age of the Tourist Sample Group and the Tourism Activity Component of the Sample Group

| Lists | Average | Standard deviation | Level of agreement | Age | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | | | | Gen-Y | Gen-X | Gen-Z | Gen-B | F-test | Sig. |
| **1) Elements of Ecotourism** | | | | | | | | | |
| 1. The integrity of the tourist attraction suitable for learning and experience the ecosystem. | 4.42 | 0.69 | Strongly agree | 4.5306 | 4.5856 | 4.6935 | 4.6875 | 2.1777 | 0.0902 |
| 2. Tourist attractions with clear air, perfect for recreation activities. | 4.58 | 0.59 | Strongly agree | 4.3827 | 4.5225 | 4.5968 | 4.6875 | 1.3852 | 0.2469 |
| 3. The surrounding area is linked to tourist attractions, such as historical sites, green areas, lifestyle, culture, etc. | 4.3 | 0.73 | Strongly agree | 4.3367 | 4.5135 | 4.4516 | 4.625 | 1.8554 | 0.1367 |
| 4. It is a tourist destination that has a beautiful scenery or is impressive compared to other attractions. | 4.47 | 0.72 | Strongly agree | 4.2296 | 4.3874 | 4.3065 | 4.5625 | 2.2993 | 0.077 |
| 5. The hostility and good courtesy of the host to the visitors. | 4.48 | 0.71 | Strongly agree | 4.4286 | 4.5315 | 4.5645 | 4.5 | 0.8374 | 0.474 |
| 6. Natural attractions have outstanding local identity. | 4.43 | 0.73 | Strongly agree | 4.3265 | 4.3243 | 4.4677 | 4.375 | 1.0221 | 0.3828 |
| 7. Tourist attractions have a variety of biological natural resources, both plants and animals. | 4.35 | 0.7 | Strongly agree | 4.4286 | 4.4144 | 4.5323 | 4.1875 | 0.7073 | 0.5481 |
| **2) Accessibility elements of tourist attractions** | | | | | | | | | |
| 1. Public transport access to tourist attractions or nearby tourist areas. | 4.19 | 0.82 | Agree | 4.102 | 4.2523 | 4.3387 | 4.3125 | 1.7625 | 0.1538 |
| 2. Roads or traffic routes that enter the tourist attraction are comfortable. | 4.27 | 0.84 | Strongly agree | 4.2551 | 4.4685 | 4.4839 | 4.3125 | 0.4766 | 0.6988 |
| 3. Easy access to resources and various channels such as social media channels, recommended documents for tourist attractions in the community, tourists service center, etc. | 4.37 | 0.75 | Strongly agree | 4.2245 | 4.3423 | 4.2581 | 4.3125 | 1.2708 | 0.2841 |
| 4. Road signs or symbols showing tourist attractions and various places within the tourist attraction are clear, easy to observe, not confusing for you. | 4.36 | 0.83 | Strongly agree | 4.301 | 4.4505 | 4.4516 | 4.3125 | 2.1889 | 0.0889 |

| Lists | Average | Standard deviation | Level of agreement | Age | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Gen-Y | Gen-X | Gen-Z | Gen-B | F-test | Sig. |
| **3) Facility elements** | | | | | | | | | |
| 1. Adequate facilities for tourists such as restrooms, parking lots, staff to advice or have a public relations point for tourists. | 4.39 | 0.76 | Strongly agree | 4.3571 | 4.4234 | 4.4677 | 4.1875 | 0.7869 | 0.5018 |
| 2. Tourist sites have arrangements or safety management. | 4.46 | 0.76 | Strongly agree | 4.4133 | 4.5405 | 4.5323 | 4.125 | 1.882 | 0.1321 |
| 3. ATMs, restaurants, tourist souvenir shops, sufficient to accommodate tourists. | 4.1 | 0.87 | Agree | 4.3367 | 4.4234 | 4.3387 | 4.5 | 3.1197 | 0.0261 ** |
| 4. There is a sewage disposal process or system or adequate waste bins for tourists, and does not destroy the environment. | 4.37 | 0.87 | Strongly agree | 4.0612 | 4.0541 | 4.371 | 3.75 | 0.3828 | 0.7655 |
| **4) Accommodation elements** | | | | | | | | | |
| 1. The accommodation or a hotel with facilities to travel. | 4.35 | 0.76 | Strongly agree | 4.2959 | 4.3514 | 4.5161 | 4.25 | 1.4286 | 0.234 |
| 2. The accommodation is unique. | 4.25 | 0.76 | Strongly agree | 4.2653 | 4.2162 | 4.3387 | 3.875 | 1.6882 | 0.1691 |
| 3. The accommodation or hotel and the surrounding area are viewed and cleaned as well, no trashes on the floor and feel safe when staying. | 4.54 | 0.66 | Strongly agree | 4.5255 | 4.5495 | 4.5806 | 4.4375 | 0.2426 | 0.8666 |
| 4. Accommodation or hotel is harmonious and environmentally friendly. | 4.44 | 0.71 | Strongly agree | 4.4898 | 4.3514 | 4.4194 | 4.5 | 0.947 | 0.4179 |
| **5) Tourism activity elements** | | | | | | | | | |
| 1. There are a variety of activities to choose from and the tourism activities are interesting. | 4.28 | 0.78 | Strongly agree | 4.2704 | 4.2613 | 4.4032 | 4.0000 | 1.2484 | 0.2919 |
| 2. Activities have enjoyment, and it relieves stress both body and mind. | 4.42 | 0.71 | Strongly agree | 4.4082 | 4.3874 | 4.5645 | 4.1875 | 1.529 | 0.2065 |
| 3. Tourism activities to create a good experience for you. | 4.43 | 0.72 | Strongly agree | 4.4133 | 4.4414 | 4.5484 | 4.1875 | 1.2223 | 0.3013 |
| 4. Form of activities to promote the conservation of natural resources and the environment. | 4.36 | 0.76 | Strongly agree | 4.2908 | 4.3874 | 4.5161 | 4.4375 | 1.516 | 0.2099 |
| 5. A model of activities that emphasize value creation for the surrounding society in the community of ecotourism. | 4.36 | 0.77 | Strongly agree | 4.3469 | 4.3333 | 4.4516 | 4.375 | 0.3571 | 0.7841 |

NOTE: 1.00 – 1.81 = strongly disagree, 1.81 – 2.60 = disagree, 2.61 – 3.41 = uncertain, 3.41 – 4.20 = agree, 4.21 – 5.00 = strongly agree

The results from the analysis of ecotourism elements of various aspects of Thai ecotourism was found that the attractiveness aspects of the sample group had opinions towards the issue of tourist attractions with clear air suitable for recreation the most as strongly agree (4.58) For the level of accessibility, the sample group had opinions towards the issue of easy access to sources of information and various channels, such as social media channels, recommended documents for tourist attractions in the community, tourists service centers, etc. as strongly agree (4.37) For the viewpoints about the facilities, the sample group had opinions towards the issue of having adequate facilities for tourists such as toilets, parking lots, staff to advice, or have a public relations point for tourists as strongly agree (4.46) on accommodation.For the accommodation or hotels and the surrounding areas that cleaned without having trashes on the floor and feel safe when staying had opinions at the level of strongly agree (4.54). For the tourism activities, the sample group had opinions on the issue of tourism activities that created a good experience with an opinion at the level of strongly agree (4.43).

One-Way ANOVA was analyzed to find the relationship between the age of the sample and the travel demand of the Thai Eco-Tourists. The sample group of each age group had an average opinion on the need to go to a source with multiple routes and easy linking of different routes. For the cost of purchasing, the product is suitable for the quality of the products and services. For the procedures or services receiving, it is convenient, uncomplicated, understandable, and easy to follow in each age with statistically significant difference by having F-test equals to 1.036, 1.403, 0.411, 0.943, 2.409, 4.569, 0.823, 1.469, 1.213, 1.896, 3.422, 2.805, 1.038, and 0.983, respectively, and Sig equals 0.377, 0.242, 0.745, 0.420, 0.067, 0.004**, 0.482, 0.223, 0.305, 0.130, 0.017**, 0.040**, 0.376, and 0.401, respectively, are as shown in Table 5 as follows.

**Table 5**The relationship between the age of the sample and the travel demand of the Thai Eco-Tourists.

| Lists | Average | Standard deviation | Level of agreement | Age | | | | F-test | Sig. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Gen-Y | Gen-X | Gen-Z | Gen-B | | |
| 1. Tourism in tourist attractions that are local identity such as history, culture, and local traditions. | 4.24 | 0.76 | Strongly agree | 4.4 | 4.42 | 4.58 | 4.63 | 1.036 | 0.377 |
| 2. Learn a way of life or culture that is different from the resident tourist destinations. | 4.32 | 0.71 | Strongly agree | 4.41 | 4.51 | 4.68 | 4.56 | 1.403 | 0.242 |
| 3. Fame or souvenir product and historical sites, and local customs. | 4.15 | 0.82 | Strongly agree | 4.43 | 4.57 | 4.61 | 4.44 | 0.411 | 0.745 |
| 4. Travel to diverse tourist resource areas such as history, traditions and cultures. | 4.29 | 0.77 | Strongly agree | 4.39 | 4.45 | 4.56 | 4.44 | 0.943 | 0.42 |
| 5. Travel into the area/tourist area is convenient. | 4.37 | 0.74 | Strongly agree | 4.42 | 4.39 | 4.73 | 4.38 | 2.409 | 0.067 |
| 6.Easy access to a source with multiple routes and links to travel options | 4.44 | 0.69 | Strongly agree | 4.42 | 4.5 | 4.55 | 4.38 | 4.569 | 0.004 |
| 7. Provide people in the community to travel. They are friendly towards visitors and provide very welcoming feeling to tourists. | 4.46 | 0.68 | Strongly agree | 4.42 | 4.41 | 4.65 | 4.31 | 0.823 | 0.482 |
| 8. Accommodation or hotel is comfortable and secure. | 4.5 | 0.71 | Strongly agree | 4.3 | 4.41 | 4.56 | 4.25 | 1.469 | 0.223 |
| 9. Rest in an energy-efficient managed accommodation. Do not invade nature or create rooms with natural materials. | 4.45 | 0.75 | Strongly agree | 4.22 | 4.35 | 4.37 | 4.25 | 1.213 | 0.305 |
| 10. The location of the accommodation: Can access the tourist attractions easily and convenient access to public transportation. | 4.45 | 0.74 | Strongly agree | 4.42 | 4.45 | 4.5 | 4.19 | 1.896 | 0.13 |

NOTE:  1.00 – 1.81 = strongly disagree, 1.81 – 2.60 = disagree, 2.61 – 3.41 = uncertain, 3.41 – 4.20 = agree, 4.21 – 5.00 = strongly agree

## 5.    Conclusion and Discussions

A study of the Creative Ecotourism Management of Bang Pu Community, Pattani Province has a conclusion and discussion as follows.

1) The result of the study of the potential of the Bang Pu Community, Pattani Province presented that it is a community with creative ecotourism potential. The community has abundant tourism resources, including mangrove forest, mangrove tunnel (ancient forest), the Gulf of Thailand, Birds Island, agricultural farm, community market, local culture and traditions, and tourism activities that tourists can participate in, such as, raising black crabs, picking up each other, planting mangrove forests, etc. The prominent point of Bang Pu is the Mangrove Tunnel and Bird Island as the location is the area on the Gulf of Thailand, and it is also located in the three southernmost provinces, so there are abundance of resources as it is not disturbed, especially the Birds Island where it is full of plants that are food for birds and a perfect forest containing lots of birds and being an important learning center, so it is in line with the Bird Research Group.Faculty of Science and Technology, Prince of Songkla University Pattani Campus had studied on the densities of various bird species were studied and found that the cattle egrets began to change their breeding plumage to enter the breeding period, with neck and back feathers that becomes yellow in color; whereas, from now one (November onwards) is the breeding period of little egrets.The number of little egrets is not much in December, but the cattle egrets have the increasing number as same as the pond herons that have increasing number clearly when compared to November. However, the cormorants increased slightly. On the other hand, the sleeping area at Ban Bang Pu is only a roosting site. There are no birds to lay eggs, and little egrets use the same area at the moment as a nesting site, namely the mangrove forest in Pattani Central Prison and Samae Forest near hotels. If analyzed the overall image of natural resources for ecotourism of Bang Pu community, it is considered as one of the most fertile mangrove forests in Thailand, in line with [9], saying that this place is rich with enormous resources. In addition, marine resources from Bang Pu sub-district is another important resource that has been supply to the MuangPattani District for many generations. Mangrove forest ecosystems of Bang Pu sub-district residents are being pushed as a major tourist destination under government policy.

The relationship finding between the age of the tourist sample and the tourism behavior, tourism activity elements, and travel needs of Thai eco-tourists to analyze the behavior of eco tourists in each age group by age

grouping by Gen B, Gen X, Gen Y, Gen Z, was found that the relationship between sample age and attractiveness elements had the ability to access tourist attractions, accommodation, and tourism activities with no statistically difference, but the relationship between the age of the sample group and the factors of having ATMs, restaurants, souvenir shops, tourism, sufficient to accommodate tourists, the average opinion of each age group are significantly different, so it is consistent with the [10], that Gen A consumers have more convenient travel behavior than Gen B, and they want to spend time after a tiring day of work by start spending money in their relaxing time.[11]

2) Guidelines for the appropriate creative ecotourism management of Bang Pu Community, Pattani province consists of 1) tourist locations and attractions, 2) accessibility development, 3) accommodation development, 4) development of facilities, 5) tourism business, 6) tourism development, and 7) tourism management. These aforementioned 7 management approaches are considered as appropriate for Bang Pu Community whether it is the availability of resources in the Bang Pu area considered as an area with resources to develop to suit the ecosystem and the Muslim cultural society in the area by setting guidelines for spatial development in both conservation areas and community areas, including management guidelines which emphasizes community-based tourism management in line with the research.[12] has studied the subject titled the guidelines for sustainable creative tourism development of Baan Rim Klong Community, SamutSongkhram Province, discovered that the potential of creative tourism resources so that the Ban Rim Klong Community's area becomes a creative tourism attractions with recommendations for the development of sustainable creative tourism of the Ban Rim Klong Community, SamutSongkhram Province according to the following details. Marketing development approach, Tourism development approach, and attraction, accessibility development approach, accommodation development guidelines, Facilities and Personnel Guidelines, Management approach, and the organization of tourism activities. In addition, Bang Pu Community has joined together to develop tourism network. The participatory process is consistent with [13]. It is a process for people to be involved in the development of co-thinking, decision-making, and solving their own problems. [14] described the participation without any having role will surely do not result in the participation of that quality. Participants must know how to exercise their powers and control such activities, so it will result in the effective outcome. [15]explained that leaders allow all followers to take part in making decisions in the work as they can, and that explained that participation is an opportunity for individuals and/or groups of people to participate in the activities whether directly or indirectly in the form of co-awareness, co-thought, co-operation, co-decision, and follow-up the results.

## 4. Products and creative ecotourism activities of the Bang Pu community, Pattani Province

**Table 5** The Analysis of the Relationship between the Age of the Tourist Sample Group and the Tourism Activity Component of the Sample Group

| Products and creative ecotourism activities of the Bang Pu Community, Pattani Province |
|---|
| 1) Learning-based activities at Bang Pu for 3 bases, such as 1) Knowing about local plants of Bang Pu people, 2) Sea life of Bang Pu, 3) Learning about birds at Bang Pu, the consistent with the principles of ecotourism, an activity that focuses on tourism that takes into account nature, knowledge and interpretation, and stimulate conservation awareness. |
| 2) Activities to develop cruise routes, learn about coastal ecosystems and see mangrove tunnels (ancient forest), which are tourism in tourist attractions related to nature that are unique to the area, including cultural and historical sites related to the ecosystem in that area. |
| 3) Mangrove planting activity is one of the tourism patterns involved in traveling to nature and responsible cultural sites without causing interference or damage to natural resources and the environment, but with a determined objective to appreciate, learn, and enjoy the scenery, flora and fauna as well as cultural features that appear in natural sources. |
| 4) Bird watching activities at Bird Island are activities to learn about the environment and the ecosystem of tourist attractions. It is the enhancement of knowledge, experience and impression as well as raising awareness, cultivating correct awareness of tourists, local residents as well as entrepreneurs involved in the birds' conservation. |
| 5) Skating tourism activities emphasize tourists to have a joint experience in ecotourism and has created an impressive portfolio creatively skating in 5 areas: 1. I Love Bangpu Viewpoint, 2. Mangrove Tunnel, 3. Sunset view point at Pattani Bay, 4) Bamboo Lan Viewpoint, and 5) Giant Crab Viewpoint. |

5. Guidelines for the creative ecotourism management of Bang Pu Community, Pattani Province based on the results of the analysis of the potential resources of creative ecotourism of Bangpu Community, Pattani Province. It is a creative ecotourism destination. Therefore, the researcher has recommendations for the development of 7 areas, which are as follows.

### 5.1 Tourism locations and attractions

5.1.1 Develop tourism activities in which tourists can participate in the activities, which may be part of the tourism activities or as a partial tourism activity as appropriate for their skills and travel term of tourists.

5.1.2 Develop local curriculum for schools in the area for teaching and learning, production of tourism products and products, including building activities to raise awareness of conservation and inheriting traditions of local wisdom to youth.

5.1.3 Develop tourism souvenirs to meet the needs of tourists and develop various tourism activities.

5.1.4 Tourism management, manufacture of tourism souvenirs must bring a narrative of multiculturalism to create identity, and distinctive features of Pattani style.

5.1.5 The development of ecotourism routes in intact forest areas that cannot be explored, and there should be staff or specialists in exploring the area and developing new ecotourism routes, such as ancient forests.

## 5.2 Accessibility

5.2.1 Develop or add routes to and from tourist attractions both by land and water by linking tourist attractions in different sub-districts and nearby tourist attractions such as Ta Chi Cape.

5.2.2 Community owners of tourist attractions/areas arrange a car service to transport tourists from the province to the tourist attractions, taking into account the transportation service, and travel in an environmentally friendly manner. Thus, this may be considered an expense in tourism.

5.2.3 Increase and develop tourism information communication channels, including tourist attractions, eco-tourism activities, traditions, Muslim festivals in each month, as well as historical information in the area since the reign of Yaring City, so that tourists can search/access information easily.

5.2.4 update tourism information of Bangpu Community to be up-to-date, and prepare documents in an online format or QR Code or travel route to distribute to various locations, and use social media to serve as information to tourists interested in traveling.

## 5.3 Accommodation

5.3.1 Provide training and knowledge on accommodation management, experience Muslim culture, and community lifestyle (Homestay) for the villagers in the community.

5.3.2 Encourage and support villagers in the community to organize accommodations that provide experience with the Muslim culture to accommodate tourists along with making rules and regulations.

5.3.3 A homestay committee should be established to conduct a queue, examine, and handle the accommodation reservation.

## 5.4 Facilities

5.4.1 Develop infrastructure and facilities in the area for the use of the people of the area as well as facilitating the creative eco-tourists

5.4.2 Prepare meaningful signs explaining the history of tourist sites, archaeological sites and antiques in every tourist attraction or place by creating 2 or 3 languages as appropriate, such as Thai, Malaysia, and United Kingdom.

5.4.3 Train youth in the area to act as a tour guide leading tourists to tourist attractions and being a demonstrator of ecotourism activities to create awareness of conservation as well as inheriting the traditional way of life, local wisdom, or local tourism activities to the youth.

## 5.5 Tourism activities

5.5.1 Arrange an experiential tourism route in sub-district, district and connected areas by focusing on activities that allow tourists to participate classified as individual tourism, group, family, and in community to create more options for tourists.

5.5.2 Make an eco-tourism program in the form of a charter, including travel expenses as well as participating in tourism activities, camps, meals, etc., including creating a separate experiential tour program and cost for information and facilitates the needs of tourists.

5.5.3 Design tourism activities for tourists to take part in tourism activities to create an experience of doing real action with the owner of the local wisdom.

5.5.4 Develop a form of tourism activities that allow tourists to spend the longest time in the area. There are various programs for tourists to choose according to the length of time needed by the tourists.

**5.6 Management**

5.6.1 Provide training and knowledge on ecotourism management in the community.

5.6.2 Establish a one-stop visitor service center in the community.

5.6.3 Create a database of ecotourism in the community and disseminate it to the public and tourists to be able to search easily, including updating the information to be up to date all the time

5.6.4 Make a history and narrative of all ecotourism activities by writing written information as a reference from generation to generation and cut the story short to disseminate the history attached to the tourism souvenir products or tell stories to tourists. It is a presentation of a unique local identity and make a difference in tourism activities.

5.6.5 Jointly formulate short-term plans with long-term sustainable tourism management does not destroy the community ecosystem, and tourism is environmentally friendly.

5.6.6 Use marketing tools as a tool for promoting ecotourism with an emphasis on community participation, sustainable tourism, and tourism is environmentally friendly.

**5.7 Aspect of community participation**

5.7.1 Create a network of experienced tourism entrepreneurs in the community and nearby areas Including building a network of business operators to facilitate creative ecotourism management;

5.7.2 Establish a community enterprise or a professional group to meet and discuss production, and development of product design for tourism souvenirs to support ecotourism in the Bang Pu community, Pattani Province.

**6.    Suggestions**

**1. Suggestions to the relevant organizations**

**1.1 Suggestions to the government**

Government organizations involved in tourism of the province should take it as a guideline to promote creative ecotourism in order to attract more tourists to travel in the Bang Pu Community, Pattani Province, including the use of a tool to increase competitiveness in the eco-tourism business creatively with Malaysia and other regional competitors.

**1.2 Suggestions to the private sectors**

Entrepreneurs should cooperate with the community in managing the tourist area, taking into account the impact on the community. Moreover, the demand of tourists is greater than the profits obtained from doing business and operators and owners of tourist attractions by using the results of the analysis on strengths, weaknesses, opportunities and obstacles to apply to develop creative ecotourism activities in Bang Pu community, Pattani Province.

**1.3 Suggestions to the public sectors**

Community leaders must have a high level of leadership, strong, reliable, and can clarify or ask for cooperation in improving as well as developing from the people in the community. For the residents of the community, they should be good hosts, honest, and being a good hospitality in accepting tourists with knowledge, understanding of their culture, and traditions and able to convey to tourists who come to travel in the community as well.

**1.4 Suggestions to the tourists**

Tourists should strictly follow the instructions and rules of the attractions strictly with conscious as well as conserving and do not destroying the tourism resources in the tourist attractions, including traveling with respect to the differences between the cultures, traditions, beliefs, and lifestyles of the Muslims in such tourist attraction..

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