

## Applying the PNI Modified to Assess Tourist Needs Priority for Tourism Components Management

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### Abstract

This research aimed to prioritize tourists' needs concerning tourism management components and to analyze the discrepancies between tourists' expectations and the current situation of these components in the Ban Na Wiang Yai Community, Dan Sai District, Loei Province. A sample of 369 tourists visiting the Ban Na Wiang Yai Community and the Phi Ta Khon Mask Museum in Dan Sai District, Loei Province, was selected using convenience sampling. Data were collected via questionnaires. Statistical analyses included percentages, mean, standard deviation, the Modified Priority Needs Index (PNI<sub>Modified</sub>), and paired samples t-tests. The findings revealed that English signage was the most pressing need, followed by travel safety management and the availability of sufficient restaurants. A comparison between expectations and the current situation regarding tourism management components showed statistically significant differences across all aspects. The outcomes of this research offer substantial benefits for shaping community tourism development. Specifically, they provide valuable input for relevant government and provincial tourism agencies, assisting them in formulating practical tourism development policies within the area.

**Keywords:** Components of tourism, Phi Ta Khon Museum, The modified priority needs index

### Introduction

The National Strategy (2018-2037) articulates that the country's development aims to achieve national security, public well-being, continuous economic growth, and sustainable natural resources by enhancing the country's potential in various dimensions. Furthermore, the National Strategy on Enhancing Competitiveness, specifically in diversifying tourism, particularly creative tourism, and the National Strategy on Creating Opportunities and Social Equality, focusing on strengthening the capacity of local communities to develop self-reliance and self-management (Office of the National Strategy Secretariat, National Economic and Social Development Council, 2018), clearly indicate that the country's development goals are centered on developing tourism diversity and empowering communities to manage themselves for income generation.

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The merit-making ceremony (Boon Luang ceremony) and Phi Ta Khon ghost mask parade, held annually between June and July in Dan Sai District, Loei Province, is a tradition rooted in the faith of the local community and renowned among both Thai and international tourists (Khumting & Sookcharoen, 2021). In 2018, the Phi Ta Khon Mask Museum was established through the initiative of the Ban Na Wiang Yai Community Enterprise for Tourism group, aiming to leverage tourism as a catalyst for community development. Collaborating with local culinary experts and artisans specializing in Phi Ta Khon mask art, the museum houses a collection of masks from past festivals and hosts a mask competition. Furthermore, the museum promotes artistic activities related to the masks, showcases local cuisine, and facilitates the creation of ceremonial waxed tripod offering festivals at the revered Phra That Sri Song Rak pagoda. Post-pandemic, under the community's tourism management, micro-level tourism, particularly domestic travel, has surged in popularity, especially among tourists seeking authentic cultural experiences and a simpler way of life. This trend suggests a growing interest in cultural tourism as a preferred activity (Ohe, 2022).

The concept of push and pull motives in tourism suggests that tourists' interests are driven by factors related to socio-psychological needs, which are internal factors, such as the desire to escape the monotony of life, the desire to discover or learn new things in life, the desire to fulfill their identity, and the need to relax. On the other hand, pull motives relate to external factors that attract interest, which are related to the tourism components of the destination, such as the physical attractions of the destination, the safety of traveling to the destination, the facilities, and the cleanliness of the destination. These pull motives are factors related to tourists' travel decisions (Ayoub & Mohamed, 2024).

Therefore, the development of a community-based tourism management system is essential. Need assessment, using the Modified Priority Needs Index (PNI<sub>Modified</sub>), is a tool that enables community tourism management groups to analyze gaps in their community's tourism management. While the application of the Modified Priority Needs Index (PNI) in the context of community-based tourism components remains limited. This aligns with the research on needs assessment applied to the tourism context by Buaphuan et al. (2020), which emphasizes the importance of needs assessment in identifying areas for community self-assessment and development. Consequently, this research aims to investigate tourist needs regarding the management of the 4As of tourism components: attractions, accessibility of tourist sites, amenities, and ancillary services. The analysis results will reveal targets for precise development of tourism component management and provide data for relevant local tourism agencies to plan development initiatives to further promote community-based tourism.

## Objectives of the Research

1. To explore the expectations and current situation of tourists regarding the components of tourism management in Ban Na Wiang Yai Community, Dan Sai District, Loei Province.
2. To analyze the needs priority of tourists regarding the components of tourism management in Ban Na Wiang Yai Community, Dan Sai District, Loei Province.

3. To analyze the differences between the expectations and current situation of tourists regarding the components of tourism management in Ban Na Wiang Yai Community, Dan Sai District, Loei Province.

## Literature Review

### 1. Concepts regarding the components of tourism

The components of tourism refer to any supporting elements and activities related to tourism. Cooper and Boniface (1998), and Cooper (2000), summarized the key components of tourism as attractions, accessibility, amenities, and ancillary services. Meanwhile, Aungsuwattanakunsiri (2019), drawing from Tourism Western Australia, identified five key components of tourism (the 5As): attractions, accessibility, amenities, activities, and accommodation. To align with the local context, this research focuses on the components of community-based tourism in Ban Na Wiang Yai, Dan Sai District, Loei Province, specifically attractions, accessibility, amenities, and ancillary services.

1) Attractions are elements that attract tourists, encompassing cultural values, historical significance, natural beauty, aesthetically pleasing structures, or entertainment venues such as historical sites, museums, art exhibitions, and unique physical attractions, both tangible and intangible (Erislan, 2016). 2) Accessibility of Tourist Sites, accessibility refers to the ease with which tourists can reach and navigate a destination. It encompasses transportation as a fundamental physical element for tourist travel. It may be assessed by considering the convenience and obstacles of travel, as well as clearly visible signage (Darcy et al. 2020). 3) Amenities are facilities that tourists require, such as restrooms, signage, tourist information centers, and emergency services. They constitute basic services essential for tourism and public utilities available at the tourist destination for convenient tourist use (Jaktong & Kaewnuch, 2022). And 4) Ancillary Services refer to any actions related and consistent with the tourism environment of the community, reflecting the unique identity and wisdom of the people within the community.

### 2. Concepts of Needs Assessment

Needs assessment is the process of analyzing and prioritizing problems or situations. It provides a clear direction for planning. Wongwanich (2019) outlined the development of needs assessment for the purposes of 1) identifying desired goals, 2) planning work, and 3) planning and implementing work plans. The results of the analysis can be used to inform decision-making and planning. Regarding needs assessment methods, the Priority Needs Index (PNI) Modified is an adaptation of the original PNI formula. The original PNI calculates the difference between the mean of expectations (I) and the mean of current status perception (D), or (I-D). Subsequently, the mean of current status perception (D) is used as a divisor to control the magnitude of the need, preventing excessively wide gaps and providing a comparative perspective. This results in the formula (I-D)/D (Wongwanich, 2005; Siihaa & Balee, 2021).

Regarding the application of needs assessment in the tourism context, Buaphuan et al. (2020) conducted research on the information needs for cultural tourism resources along the

horse-drawn carriage route for Chinese-speaking tourists in Lampang Province. Mekdee and Sastsara (2023) assessed the needs for developing leadership competency to promote smart tourism. Additionally, Kaewpach et al. (2021) utilized needs assessment methodology to evaluate tourist expectations and perceptions of skywalk tourism management in Chiang Khan District, Loei Province. From these examples, the researchers conclude that needs assessment analysis can be used as a tool for analyzing and prioritizing community-based tourism.

Furthermore, the researchers examined the difference between tourists' perceptions of the current situation and their expectations regarding tourism components management. Yildiz and Kiliç (2016) found significant differences in perceptions and expectations concerning tourism components related to attractions, particularly in the care of cultural villages; tourism-related activities in museums; and the amenities of hygiene and cleanliness. Insuwanno and Phetvaroon (2022) analyzed the difference between satisfaction and expectations regarding marine tourism components. Their results revealed significant differences between tourists' expectations and satisfaction with marine attractions, signage used for accessing tourist sites, and the overall cleanliness of amenities, as well as the diversity of tourism activities related to culture. Based on the review of relevant research, the researchers formulated the following hypotheses:

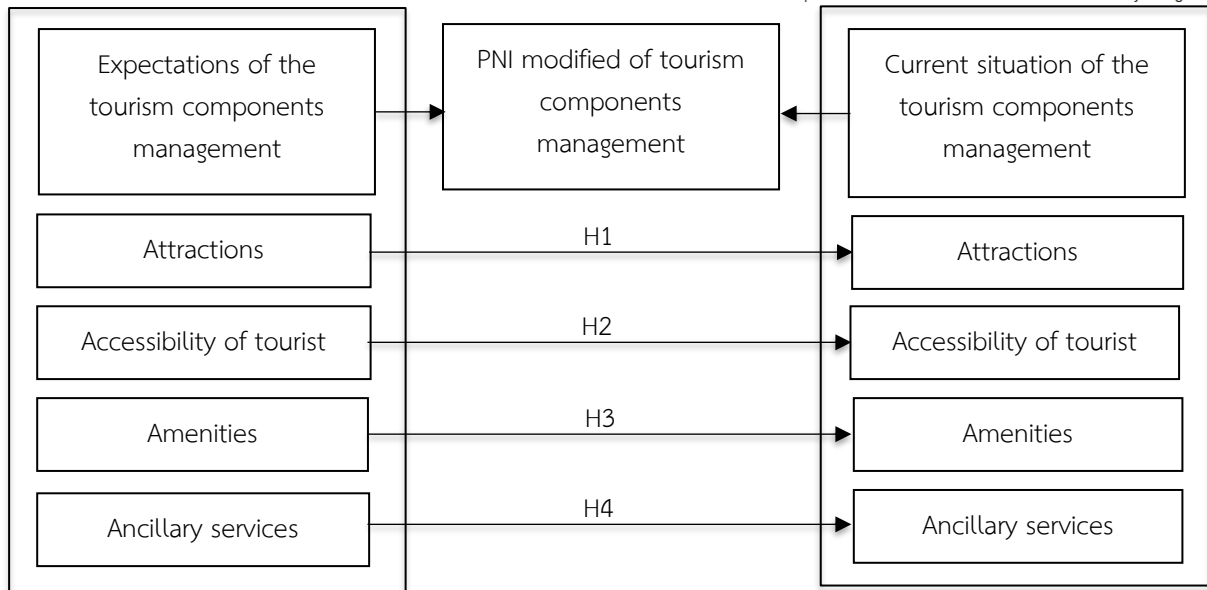
H1: There is a significant difference between expectations and the current situation regarding attractions management.

H2: There is a significant difference between expectations and the current situation regarding accessibility of tourist sites management.

H3: There is a significant difference between expectations and the current situation regarding amenities management.

H4: There is a significant difference between expectations and the current situation regarding ancillary services management.

The researchers developed a conceptual framework, presented in Figure 1.



**Figure 1: Conceptual Framework**

## Research Methodology

### 1. Population and Sample

The population consisted of tourists and groups visiting Ban Na Wiang Yai Community for community-based tourism and/or the Phi Ta Khon Mask Museum in Dan Sai District, Loei Province. Since the target population comprises tourists and study visitors to the Phi Ta Khon Mask Museum in Ban Na Wiang Yai, Dan Sai District, Loei Province, and their exact number cannot be determined, the researchers established the sample size without a precisely definable population. A sample size of 369 was calculated using a standard formula for determining sample size in populations of unknown size. The calculation was based on an estimated population proportion of 0.60, a margin of error of 0.05, and a Z-score of 1.96, which corresponds to the desired confidence level.

A convenience sampling method was utilized. Participants were recruited from tourists and study groups visiting the community tourism sites and/or the Phi Ta Khon Mask Museum in Dan Sai District, Loei Province. Potential participants were screened based on pre-defined inclusion criteria. Only those who provided informed consent were included in the study.

### 2. Research Instrument

The primary data collection instrument was a questionnaire, which consisted of two parts:

Part 1: Respondent demographics and tourism behavior: This section employed a checklist format with 10 items, gathering basic demographic information about the respondents.

Part 2: Perceptions and Expectations: This section utilized a 5-point rating scale to assess tourists' expectations and current situation regarding tourism components management. The 5-rating scale ranged from "Very High" to "Very Low," with 26 items in total, covering both perceptions and expectations.

The questionnaire underwent a two-stage validation process. First, its content validity was assessed to ensure academic accuracy and alignment with the research objectives, using the

Index of Item Objective Congruence (IOC) method with three experts in cultural tourism and service marketing. The IOC scores ranged from 0.67-1.00. Second, a pilot study was conducted with 30 respondents to evaluate reliability. The resulting Cronbach's alpha coefficient of 0.97 demonstrated strong reliability, surpassing the recommended 0.70 threshold (Hair et al. 2019).

Data collection proceeded in several stages. First, a questionnaire was developed based on a review of relevant literature and research. Its quality was then rigorously assessed through a pilot test with 30 individuals, followed by revisions informed by expert feedback. Reliability was subsequently established. The refined questionnaire was then administered to the target participants after explaining the study's objectives. Informed consent was obtained before data collection. For participants belonging to study groups, organizational contact information was requested. A formal letter of cooperation, accompanied by IRB approval documentation, was then mailed to the respective organizations. Completed questionnaires were collected via return mail.

### 3. Data Analysis

The following statistical methods were employed to analyze the data:

1. Descriptive Statistics: Descriptive statistics, including percentage, mean, and standard deviation, were used to summarize the data.

2. Priority Needs Index: The Modified Priority Needs Index (PNI<sub>Modified</sub>) was used to analyze the needs, current situation, and expectations of tourists regarding community-based tourism. (Wongwanich, 2005) is calculated as follows:

$$PNI_{Modified} = (I - D) / D$$

Where: PNI = Priority Needs Index  
 I = Mean score of expectations  
 D = Mean score of perceptions

3. Analysis of the difference in mean values between two groups between the expectations and current situation of tourists towards tourism components management using the paired samples t-test.

### Results

Most respondents were female (n = 235, 67.7%). The largest age cohort was 38–47 years (n = 116, 33.4%). Most respondents were residents of the Northeastern region of Thailand (n = 279, 80.4%), held a bachelor's degree (n = 181, 52.2%), and were married (n = 172, 49.6%). The most common occupation was government official or state employee (n = 150, 34.2%), and the most frequent monthly income bracket was 10,000–20,000 THB (n = 110, 31.7%).

Regarding tourism behavior, the most common travel arrangement was with family (n = 101, 29.1%). The primary motivation for visiting the community was interest in the local way of life (n = 178, 51.3%). The most frequently reported activity was learning about the community's way of life and culture, followed by visiting the Phi Ta Khon Mask Museum and exploring the community's history and unique characteristics, respectively. The results of the analysis of tourists'

current situation, expectations, and needs regarding tourism components management are presented in Table 1-4

**Table 1** Means, standard deviations, PNI, and t-test values for tourists' expectations, current situation, and priority needs for attractions management

Terms of attractions	Expectations		Current Situation		PNI	t	P
	$\bar{X}$	S.D.	$\bar{X}$	S.D.			
1. Unique local customs/traditions/culture/lifestyle	4.19	0.67	3.94	0.69	0.06	-5.76	0.00*
2. Attractive tourist site decoration	4.10	0.70	3.62	0.73	0.13	-10.06	0.00*
3. Community scenery/atmosphere	4.10	0.68	3.68	0.70	0.11	-9.77	0.00*
4. Phi Ta Khon mask display materials	4.16	0.66	3.82	0.72	0.09	-7.88	0.00*
5. Lighting Phi Ta Khon mask display	4.06	0.72	3.53	0.78	0.15	-10.38	0.00*
6. Unique local souvenirs (e.g., Phi Ta Khon masks)	4.08	0.65	3.61	0.76	0.13	-9.86	0.00*
7. Souvenir	4.02	0.73	3.49	0.78	0.15	-10.36	0.00*

\*Statistical significance level at 0.05

Table 1 presents tourists' situation of the current state of tourism components management with respect to attractions. The highest mean score was observed for the unique local customs/traditions/culture/lifestyle, Phi Ta Khon mask display materials received the second highest mean score. Conversely, souvenir received the lowest mean score. Regarding tourists' expectations for tourism components management concerning attractions, the highest mean score was again for unique local customs/traditions/culture/lifestyle followed by Phi Ta Khon mask display materials, community scenery/atmosphere, souvenir packaging also received the lowest mean score for expectations.

Analysis of the Priority Needs Index for tourism components management concerning attractions revealed that lighting Phi Ta Khon mask display was the highest priority need. Souvenir was the second highest priority. Unique local customs/traditions/culture/lifestyle was identified the lowest. The results also show that the expectations and current situation of tourists regarding attractions in all aspects are statistically significantly different.



**Table 2** Means, standard deviations, PNI, and t-test values for tourists' expectations, current situation, and priority needs for accessibility of tourist sites management

Terms of accessibility of tourist sites	Expectations		Current Situation		PNI	t	P
	$\bar{X}$	S.D.	$\bar{X}$	S.D.			
1. Attraction access	4.06	0.69	3.54	0.77	0.17	-10.58	0.00*
2. Attraction signage	4.04	0.72	3.45	0.83	0.17	-11.98	0.00*
3. English attraction signage	3.90	0.82	3.18	0.88	0.23	-13.51	0.00*
4. Road conditions to attractions	3.98	0.73	3.46	0.76	0.15	-10.03	0.00*
5. Online attraction search	4.07	0.69	3.54	0.83	0.15	-10.68	0.00*
6. Tourist route management	4.02	0.74	3.45	0.82	0.17	-11.69	0.00*

\*Statistical significance level at 0.05

Table 2 presents tourists' situation regarding the current state of tourism components management concerning accessibility. The highest mean score was online attraction search and attraction access. Road conditions to attractions received the second highest mean score. English attraction signage received the lowest mean score. Regarding tourists' expectations for community-based tourism management concerning accessibility, the highest mean score was for online attraction search, followed by attraction access. English attraction signage also received the lowest mean score for expectations.

Analysis of the Priority Needs Index (PNI) for tourism components management concerning accessibility revealed that English attraction signage was the highest priority need. Attraction access, attraction signage, and tourist route management were the next highest priorities. Road conditions to attractions were identified as the lowest priority need. The results also show that the expectations and current situation of tourists regarding accessibility of tourist sites in all aspects are statistically significantly different.

**Table 3** Means, standard deviations, PNI, and t-test values for tourists' expectations, current situation, and priority needs for amenities management

Terms of amenities	Expectations		Current Situation		PNI	t	P
	$\bar{X}$	S.D.	$\bar{X}$	S.D.			
1. Cleanliness of tourist attractions	4.09	0.72	3.55	0.76	0.15	-10.68	0.00*
2. Adequate and hygienic toilet provided	4.03	0.78	3.49	0.79	0.15	-10.69	0.00*
3. Travel safety management	4.10	0.72	3.45	0.78	0.19	-12.46	0.00*
4. Safety of life/property	4.08	0.70	3.54	0.76	0.15	-11.38	0.00*
5. Phi Ta Khon museum layout	4.08	0.71	3.62	0.77	0.13	-10.02	0.00*



**Table 3** Means, standard deviations, PNI, and t-test values for tourists' expectations, current situation, and priority needs for amenities management (Continue)

Terms of amenities	Expectations		Current Situation		PNI	t	P
	$\bar{X}$	S.D.	$\bar{X}$	S.D.			
6. Museum walking path width/complexity	4.05	0.73	3.55	0.78	0.14	-10.27	0.00*
7. Sufficient restaurants available	4.01	0.72	3.36	0.81	0.19	-12.94	0.00*
8. Adequate/organized trash bins	3.86	0.78	3.32	0.77	0.16	-10.87	0.00*

\*Statistical significance level at 0.05

Table 3 reveals tourists' situation of the current state of tourism components management regarding amenities. The item with the highest average score is Phi Ta Kho\*n Museum layout. Following closely are the appropriate cleanliness of tourist attractions and museum walking path width/complexity. The item with the lowest average score is adequate/organized trash bins. Regarding tourists' expectations for tourism components management, the item with the highest average score is travel safety management, followed by cleanliness of tourist attractions. The item with the lowest average score is the adequate/organized trash bins.

Concerning the priority index of tourists' essential needs for tourism components management, ensuring sufficient restaurants available and travel safety management have the highest priority index. Following this is adequate/organized trash bins, and lastly, Phi Ta Khon Museum layout. The results also show that the expectations and current situation of tourists regarding amenities in all aspects are statistically significantly different.

**Table 4** Means, standard deviations, PNI, and t-test values for tourists' expectations, current situation, and priority needs for ancillary services management

Terms of ancillary services	Expectations		Current Situation		PNI	t	P
	$\bar{X}$	S.D.	$\bar{X}$	S.D.			
1. Waxed tripod offering workshops	4.06	0.75	3.72	0.78	0.09	-7.15	0.00*
2. Local food cooking classes	4.04	0.74	3.55	0.80	0.14	-10.27	0.00*
3. Phi Ta Khon history info	4.09	0.72	3.62	0.75	0.13	-9.92	0.00*
4. Traditional folk art showcased at festivals (e.g., Loy Krathong, waxed tripod offering festivals).	4.13	0.70	3.67	0.79	0.13	-9.84	0.00*
5. Unique culture highlighted (e.g., Phi Ta Khon mask competition)	4.14	0.71	3.75	0.78	0.10	-8.36	0.00*

\*Statistical significance level at 0.05

Table 4 shows tourists' situation of the current state of tourism components management in terms of ancillary services: The item with the highest average score is unique culture highlighted (e.g., Phi Ta Khon mask competition). Following this is waxed tripod offering workshops. The item with the lowest average score is local food cooking classes. Tourists' expectations for community tourism management regarding ancillary services: The item with the highest average score is unique culture highlighted (e.g., Phi Ta Khon mask competition), Following this is traditional folk art showcased at festivals (e.g., Loy Krathong, waxed tripod offering festivals). The item with the lowest average score is local food cooking classes.

Priority index of tourists' essential needs for community tourism management: Local food cooking classes has the highest priority index. Following this is traditional folk art showcased at festivals (e.g., Loy Krathong, waxed tripod offering festivals) and Phi Ta Khon history info. Last in the ranking is waxed tripod offering workshops. The results also show that the expectations and current situation of tourists regarding ancillary services in all aspects are statistically significantly different.

## Discussion

This research aims to analyze the needs of tourists regarding the management of tourism components and to investigate the mean difference between the expectations and current situation of tourism components to confirm the needs of tourists regarding the management of tourism components. The research results confirm that the expectations and current situation of the management of tourism components in Baan Na Wiang Yai area, Dan Sai District, Loei Province are statistically significantly different. The researchers discuss the research results below:

The research findings indicate a significant need for development in the tourism component of *attractions*. This aligns with previous research (Kanjanaaratana & Pookaiyaudom, 2020), which found that tourism attractions are a primary factor influencing tourists' decision-making processes, particularly in nostalgia tourism. A detailed analysis reveals that *the lighting Phi Ta Khon mask display* exhibits the highest need for development. Effective *lighting design in museums* plays a crucial role in enhancing the visitor experience and fostering a deeper appreciation for the exhibits. Most museum displays, particularly within this region, convey profound cultural and historical meaning (Song & Puntien, 2023). Therefore, lighting design should prioritize the communication and promotion of cultural values and heritage. Museum lighting design can be broadly categorized into two types: natural lighting and artificial lighting. Natural lighting, utilized during daylight hours, offers numerous benefits. It is not only beneficial for human well-being, providing a sense of relaxation due to its familiarity, but also contributes to resource conservation. Artificial lighting, on the other hand, is designed to compensate for the limitations of natural light and to effectively highlight displayed objects (Ayobami & Ayeni, 2024). Moreover, the research highlights tourists' needs regarding *souvenirs* for cultural heritage tourism. Souvenirs are not merely products for remembering a trip but also represent intangible values such as unique local arts and culture, beliefs of the people living in or near the tourist destination, and the community's traditional way of life that has been passed down to the present. This research

is also consistent with the research by Zaal and Ramezanzadeh Lasboyee (2023), which analyzed the gap between expectations and current situation of handicraft products and their sales at cultural tourism destinations. The results showed that, from the tourists' perspective, there were gaps between expectations and current situation regarding handicraft products, especially in terms of understanding the products, the lack of quality in accessing information about the products, and the variety of products. In addition, tourist characteristics also influenced their views on souvenir products in terms of shape, color, size, and packaging.

Regarding the *accessibility of tourist sites*, the study found that *English attraction signage* was identified as the most critical need by tourists. This is particularly important for international visitors, as clear signage provides essential directional information, enabling them to navigate efficiently and stay on schedule. Furthermore, the design and quality of these signs can significantly influence tourist satisfaction. A key challenge with tourist signage lies in the effective use of language and universally understood symbols. Signs should be designed with language diversity in mind to cater to tourists who may have language limitations (Wan, 2022). These findings are consistent with the work of Nakplad et al. (2021), who analyzed the need for and development of English-language tourist information signs at cultural attractions. Their study revealed that both tourists and those responsible for the attractions strongly believe in the necessity of English signage. These signs should be easily understandable, contain accurate information, and be strategically positioned for maximum visibility.

Meanwhile, travel safety management and sufficient restaurants available, which are details of the tourism component of *amenities*, have the highest needs. Considering *travel safety*, it can be explained that tourists naturally have concerns about safety, especially when traveling to unfamiliar and different areas. This aligns with research analyzing the gap between expectations and perceptions of tourist safety in tourist destinations, which found that tourists are concerned about *safety* during their travels within the destination (Terrah et al., 2020). Furthermore, the research by Meechaiyo et al. (2021) applied road safety audit techniques to develop cultural tourism maps and assess road safety risks. It found that travel insecurity can stem from unclear traffic lane dividers, ambiguous traffic direction symbols, lack of traffic signs, unclear traffic signs, and excessive signage, all of which contribute to unsafe travel to tourist destinations. Additionally, from the context of the tourist area, where the attractions are located within temple grounds that require passing through communities without an established community safety management system, there is a lack of observation, facilitation, and reassurance for tourists. Therefore, this research reflects the essential need for developing a community safety system. Regarding *sufficient restaurants available*, the research found that this is a necessity for tourists. This aligns with the pull motivation factors, where physical attractions influence travel decisions. Similarly, the availability of sufficient restaurants, as part of tourist amenities, also influences travel decisions (Uphariputtangkul & Suveatawatanakul, 2023; Daries et al., 2021).

Regarding the need for *ancillary services*, the research revealed that *activities showcasing local cuisine* require the most development. Analysis of tourist behavior indicated that most respondents travel with family and are interested in experiencing the local lifestyle. This aligns with their strong interest in local cooking activities and the opportunity to sample local dishes.

Local cuisine uniquely reflects and promotes the cultural richness of an area (Sortrakul et al., 2024). Local food and beverages enhance a region's attractiveness. Tourists seeking authentic cultural experiences often express a keen interest in sampling local food products and tasting traditional fare. Increased attention to local food and beverages can add value to a region and contribute to its overall development. Food tourism is not merely an income-generating activity, but also a cultural enhancement activity that contributes significantly to the overall tourist experience (Kiráľ'ová, 2021). Currently, cooking activities are considered an integral part of food tourism, which has a direct impact on community-based tourism. Tourists who participate in community cooking activities and food tasting enhance their travel experiences. Surveys have shown that Thailand is ranked among the top fifteen countries globally for its exceptional food culture. Therefore, showcasing community food activities not only narrates the story of local food culture but also highlights the richness and diversity of natural resources used as ingredients. Educating tourists about local ingredients and the unique stories behind the food significantly enhances the value of community cuisine (Resmi et al., 2024).

## Conclusion

This research, by identifying tourist needs in Ban Na Wiang Yai Community, Loei Province, Thailand, indirectly reveals key pull motives for tourism. These motives-factors that attract tourists and spark their interest in firsthand experience-are addressed by improvements in English signage, travel safety management, and restaurant availability. These enhancements increase the community's attractiveness as a tourist destination and cater to visitors' fundamental requirements. The findings correlate with several levels of Maslow's hierarchy of needs, particularly physiological and safety needs, and to some extent, esteem needs. Considering the community's cultural tourism management within the framework of tourism components, these pull motives are crucial for tourism operators to attract visitors. Creating memorable experiences that meet tourist needs strengthens these pull factors and encourages return visits. While this research does not explicitly analyze pull motives or Maslow's hierarchy, the findings can be interpreted within these frameworks to better understand tourist behavior and motivations.

## Suggestion

Practical recommendations for management, the involved agencies comprise the Ban Na Wiang Yai Community-Based Tourism Enterprise Group, the Dan Sai District Office, and the Tourism Authority of Thailand (TAT) Loei Office, along with other government bodies instrumental in enhancing community tourism potential. Prioritizing English signage is crucial, as the research explicitly identifies this as the most pressing need. The community and relevant agencies should therefore prioritize the design, implementation, and maintenance of clear, informative English signage throughout the community. This recommendation can be incorporated into a short-term operational plan, executable within a timeframe of 6-12 months. Improving travel safety management is the second highest priority. The community needs to review and enhance current safety measures, including: 1) better road safety, especially for tourists unfamiliar with local

routes, along with clear safety precaution information; 2) heightened security in tourist zones; and 3) the development of robust emergency response plans. Nevertheless, successful safety implementation in the area necessitates direct collaboration and input from the Loei Provincial Tourist Police. They should be engaged in joint operational planning, and a comprehensive safety management framework should be established within one year and widely disseminated to the local population. While the research mentions sufficient restaurants, the community should encourage the development of diverse dining options to cater to various tastes and budgets. This could involve supporting local entrepreneurs in opening restaurants or attracting established restaurants to the area. In cases where a locality has distinctive unique local food, restaurant operators should promote experimental cooking and allow tourists to participate in the cooking themselves, which promotes gastronomic tourism. Establish mechanisms for ongoing feedback from tourists. This could include online surveys, feedback boxes, or regular meetings with local tourism businesses. Involve the community in the planning and implementation of tourism development initiatives to ensure that they align with local values and priorities.

For future research: Qualitative research on needs, while the current research identifies what the needs are, it doesn't explore why. Qualitative methodology, such as interviews and focus groups, can provide deeper insights into the reasons behind tourist needs and preferences. This can help to develop more targeted and effective interventions. And compare Ban Na Wiang Yai Community with other similar communities to identify best practices in tourism management.

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## References

- Aungsuwattanakunsiri, C. (2019). *Relationship between components of tourism destination and tourists' decision making: A case study in Chachoengsao province* [Unpublished master's independent study]. Burapha University.
- Ayobami, F.E. & Ayeni, D.A. (2024). Optimizing cultural tourism through effective lighting design. *British Journal of Multidisciplinary and Advanced Studies*, 5(5), 1-27.
- Ayoub, D. & Mohamed, D.N.H.S. (2024). The impact of push-pull motives on internal tourists' visit and revisit intentions to Egyptian domestic destinations: the mediating role of country image. *Humanities and Social Sciences Communications*, 11(358), 1-13.
- Buaphuan, N. Phetchuai, S., & Somsaruy, N. (2020). Needs Assessment of the Community as a Culture Tourist Attraction along the Horse-carriage Route for Chinese-speaking Tourists in Lampang Province. *Dusit Thani College Journal*, 14(3), 667-684. (In Thai)
- Cooper, C. (2000). *Tourism: Principles and Practice*. (2nd ed). Longman, England.
- Cooper, C. & Boniface, B. G. (1998). *Geography of travel and tourism*. UK: Butterworth Heinemann.

- Darcy, S., McKercher, B., & Schweinsberg, S. (2020). From tourism and disability to accessible tourism: a perspective article. *Tourism Review*, 75(1), 140-144.
- Daries, N., Marine-Roig, E., Ferrer-Rosell, B., & Cristobal-Fransi, E. (2021). Do high-quality restaurants act as pull factors to a tourist destination.? *Tourism Analysis (Special issue on Wine and Culinary Tourism Futures)*, 26(2-3), 195-210.
- Erislan, (2016). Tourist attraction and the uniqueness of resources on tourist destination in West Java, Indonesia. *Review of Integrative Business and Economics Research*, 5(1), 251-266.
- Insuwanno P. & Phetvaroon, K. (2022). An Investigation of senior tourist's expectations and satisfaction: A case study of Andaman Provinces, Thailand. *Journal of International Studies, Prince of Songkla University*, 12(2), 28-61. (In Thai)
- Jaktong, C. & Kaewnuch, K. (2022). Factors affecting active aging tourist's decision to join agrotourism activity in Thailand. *Journal of International and Thai Tourism*, 18(1), 62-85. (In Thai)
- Hair, A.F, Black, W.C., Babin, B.J., & Anderson, R.E. (2019). *Multivariate Data Analysis*. (8th ed.). Cengage Learning EMEA.
- Kaewpach, P. Kaewpach, W., & Yakampom, V. (2021). Expectation and perception of tourists towards tourism management at the sky walk, Chiang Khan District, Loei Province. *Research and Development Journal, Loei Rajaphat University*, 16(58), 46-57. (In Thai)
- Kanjanaratana, N. & Pookaiyaudom, G. (2020). Components of tourism affecting the interest in nostalgic tourism of Thai tourists based in Bangkok. *Journal of Sports Science and Health*, 21(2), 283-294. (In Thai)
- Khumting, T. & Sookcharoen, P. (2021). Boon Luang tradition and Phi Ta Khon festival, Dansai District, Loei Province: The functions of invented tradition in the COVID-19 crisis. *University of the Thai Chamber of Commerce Journal Humanities and Social Sciences*, 41(1), 21-36. (In Thai)
- Királ'ová, A. (2021). Local food as a tool of tourism development in regions. *International Journal of Tourism and Hospitality Management in the Digital Age*, 5(1), 54-68.
- Office of the National Strategy Secretariat, National Economic and Social Development Council. (2018). *National Strategy 2018-2037 (Summary)*.  
[https://www.nesdc.go.th/download/document/SAC/NS\\_SumPlanOct2018.pdf](https://www.nesdc.go.th/download/document/SAC/NS_SumPlanOct2018.pdf) (In Thai)
- Ohe, Y. (2022). Rural tourism under the new normal: New potentials from a Japanese perspective. *Proceedings of Sustainable Tourism 2022*, 256, (pp.51-62). *WIT Transactions on Ecology and the Environment*. <https://www.witpress.com/elibrary/wit-transactions-on-ecology-and-the-environment/256/38252>
- Meechaiyo, B., Songsittidate, S., & Settasuwacha, D. (2021). Application of road safety audit technique to develop cultural tourism map in Phitsanulok province. *Industrial Technology and Engineering Pibulsongkram Rajabhat University Journal*, 3(3), 207-226. (In Thai)



- Mekdee, K. & Sastsara, S. (2023). Developing leadership competency to promote smart tourism: A case study of tourism community in the upper central region. *Journal of Social Science and Cultural*, 7(1), 60-77. (In Thai)
- Nakplad, R., Mittajan, A., & Innarong, T. (2021). Needs analysis and development of English-language tourist guide signs at That Noi temple in Nakhon Si Thammarat province. *Journal of Liberal Arts, Prince of Songkla University*, 13(2), 170-194.
- Resmi, I.C., Dhewanto, W., & Dellyana, D. (2024). Gastronomy tourism: Local food and tourism experience in Bandung. Proceedings of the 7th Global Conference on Business, Management, and Entrepreneurship 2022, *Advances in Economics, Business and Management Research* 255, 1804-1810. [https://doi.org/10.2991/978-94-6463-234-7\\_190](https://doi.org/10.2991/978-94-6463-234-7_190)
- Siihaa, P. & Balee, S. (2021). *Concepts and theories relevant to needs and expectations assessment*. <https://dusitpoll.dusit.ac.th/KB/2021/594/> (In Thai)
- Song, B. & Puntien, P. (2023). The light design in exhibition spaces. *Journal of Roi Kaensarn Academi*, 9(4), 183-198. (In Thai)
- Sortrakul, S., Inthajak, M., Trakansiriwanich, K., & Udomraksasup, P.C. (2024). Local food contexts influencing tourism in Trang province. *Nakhabut Paritat Journal*, 16(3), 226-238. (In Thai)
- Teerah, A., Wildes, V., & Mistry, T.G. (2020). Antalya's tourist security: A gap analysis of Expectations vs perceptions. *Journal of Global Business*, 5(2), 148-168.
- Uphariputtangkul, K. & Suveatawatanakul, C. (2023). Components of tourism that affect the Decision to travel with strangers. a case study of a Korean fan club. *Journal of International and Thai Tourism*, 19(2), 93-116. (In Thai)
- Wan, Y.K.P. (2022). Accessibility of tourist signage at heritage sites: an application of the universal design principles. *Tourism Recreation Research*, <https://doi.org/10.1080/02508281.2022.2106099>
- Wongwanich, S. (2005). *Need assessment research*. Bangkok: Chulalongkorn University Press, Chulalongkorn University. (In Thai)
- Wongwanich, S. (2019). *Need assessment research*. (4th ed). Bangkok: Chulalongkorn University Press, Chulalongkorn University. (In Thai)
- Yildiz, S.B. & Kiliç, S.N. (2016). Expectations and satisfaction perceptions of tourists, who travel for purpose of culture: Case study of Bergama. In Avcikurt, C., Dinu, M.S., Hacıoğlu, N., Efe, R., Soykan, A. & Tetik, N. (Eds), *Global issues and trends in tourism* (pp.405-416). ST. KLIMENT OHRIDSKI UNIVERSITY PRESS.
- Zaal, M.H. & Ramezanzadeh Lasboyee, M. (2023). Gap analysis between expectations and current status of handicrafts production and sales with cultural heritage tourism approach the case study A Amol County. *Journal of Urban Tourism*, 10 (3), 89-110.