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UNVEILING VISITORS' DELIGHT IN MANGROVE POINT PARK AS AN ECOTOURISM SPOT: AN ANALYSIS OF ACTIVITIES AND FACILITIES SATISFACTION

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ABSTRACT

Mangrove Point Park in the Klang Islands Mangrove Forest Reserve stands as a testament to eco-tourism's rejuvenating power. Once threatened by development, these mangroves have found a new life through the Selangor Maritime Gateway project. Since its opening in March 2023, the park has become a popular eco-tourism spot, offering various activities. This research aims to assess visitors' satisfaction towards the existing activities and facilities at the site through a blend of qualitative and quantitative data collection methods. The study utilizes site inventory, observation, and a questionnaire survey to comprehensively evaluate the park's offerings. It seeks to seamlessly incorporate the research's overarching objectives, which are (1) to identify the key activities and facilities currently provided, (2) to evaluate the expectation and performance gap in promoting the ecotourism

industry, and (3) to examine visitors' satisfaction with the facilities and activities at Mangrove Point Park. The results of this study confirm that visitors are mostly dissatisfied with the provided activities and facilities, mainly on comfort and safety aspects, indicating the need for action to achieve higher visitors' satisfaction.

Keywords: *Activities and Facilities Satisfaction, Ecotourism Spot, Mangrove Point Park, Visitor's delight*

INTRODUCTION

Mangroves cover over 629, 038 acres total across Malaysia. The peninsula has about 18% of the coverage, while Sarawak and Sabah have 22% and 60% (Ramli et al., 2023). Economically, mangroves could be preserved areas, catchments, tourist destinations, and wood sources (Purwanty et al., 2019). Ecotourism emerged in the 1980s, describing travelling to undisturbed natural areas to observe landscapes, wildlife, and culture (Gohar & Mathias Kondolf, 2020). The dominant vegetation in the Klang region is mangrove, with the largest forest reserve being the Klang Islands Mangrove Forest Reserved (Norhayati et al., 2009). The Mangrove Point Park covers 70.8 acres along the Klang River, showcasing mangroves, flora and fauna. The conservation park revitalized an underdeveloped area through development completed in March 2023, transforming it into a popular tourist destination (IBR Asia, 2022). Thus, this research aims to assess visitors' satisfaction with the facilities and activities provided along with the objectives below:

1. To identify the key facilities and activities provided at Mangrove Point.
2. To evaluate the expectation and performance gap associated with the facilities and activities in promoting the ecotourism industry.
3. To determine visitors' satisfaction with the facilities and activities provided at partially developed Mangrove Point Park.

LITERATURE REVIEW

Classification of Mangrove in Malaysia

The forested regions in Malaysia are categorized into inland

dipterocarps (dryland), peat swamps, and mangrove forests (wetlands). Mangroves include fringe, riverine, and basin types (Omar et al., 2020). This study focuses on the riverine forest near Mangrove Point Park. Riverine forests, potentially the most productive, play a crucial role in sustaining flora and fauna, making them ideal for ecological tourism activities like bird watching, boat safaris, and meditation in the mangrove environment (K. C. Ewel, 1998).

Mangrove as An Ecotourism Spot

The preservation of natural resources aims to responsibly utilize resources for the current generation while safeguarding the environment for future generations (Surya et al., 2020). Mangrove conservation faces challenges due to economic development goals not adequately addressing mangrove loss. Creating mangrove parks offers legal protection and fosters community engagement, vital for conservation efforts (Thu Thuy & Van Dien, 2021). In Malaysia, ecotourism, accounting for 20% of tourist arrivals, is crucial for income and environmental benefits (Ayob et al., 2009). Promoting mangrove ecotourism supports sustainable coastal areas through environmental conservation, economic sustainability, and community support (Kissinger et al., 2020; Nur Nobi & Majumder, 2019).

Mangrove Forest Park Visitors' Experiences and Satisfaction

Ensuring tourist satisfaction is paramount for destinations and organizations (Bam & Kunwar, 2020). Satisfied tourists are likely to revisit destinations or provide favourable feedback, promoting free word-of-mouth marketing. Evidence shows a positive correlation between tourist satisfaction and long-term economic success. Sustaining destinations requires aligning facilities with attractions. The combination generates subjective experiences, or a "tourism product," fulfilling customer needs (Smith, 2001).

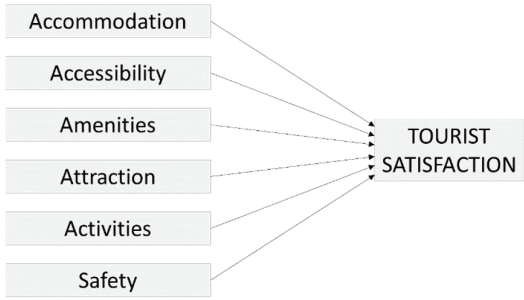

Figure 1. The Holistic Satisfaction (HOLSAT) Model
Biswas, Deb, et al., (2020)

The Holistic Satisfaction (HOLSAT) model as in Figure 1, assesses the gap between tourist expectations before travelling and experiences after visiting. This gap gauges satisfaction levels in tourism. The model emphasizes diverse, engaging activities that significantly impact satisfaction. Accommodation and amenities also influence visitor comfort and convenience (Biswas, Omar, et al., 2020). When activities and facilities align effectively, satisfaction stems from well-maintained facilities enhancing activity experiences. Accommodation, amenities, and attractions collectively form the facilities element.

METHODOLOGY

Background of The Site Study

This research was conducted at Mangrove Point Park in Pelabuhan Klang, Selangor as shown in Figures 2 and 3. Mangrove Point was selected due to its new status as a mangrove park, providing an ideal location to gather feedback on visitor satisfaction with activities and facilities. The Mangrove Point offers free entry to encourage widespread public access in fostering environmental education and nature engagement among users.

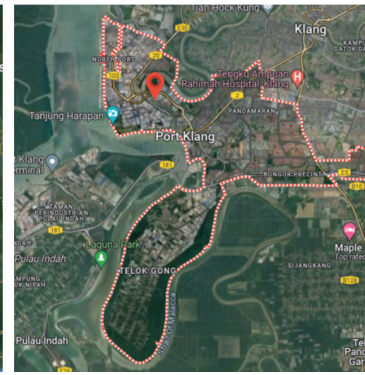

Figure 2: Key Plan of Study Area Figure 3: Location Plan of Study Area

Techniques of Data Collection

The study employs site inventory, observation, and a questionnaire survey. Site inventory identifies key facilities and activities at Mangrove Point through visual documentation to understand the park's facilities and activities in depth. Observation captures dynamic activities. The questionnaire assesses visitor satisfaction through a self-administered format with qualitative and quantitative sections.

Site Inventory and Observation

The process of observation is scheduled as follows:

Table 1. Observation Schedule of The Site Visit

Visit	Date		Weather		Instrument	
1	Tuesday November 14, 2023	The observation was documented textually and visually	Sunny	To observe activity performance and the durability of facilities based on weather	Mapping Site Base Plan To locate the placement of the specific activities and facilities available and based on the spatial context.	Observation Checklist To identify key parameters for activities (mode, intentionality, location, facilities) and facilities (quantity, cosmetic, condition, usage)
2	Saturday December 2, 2023	To observe anything that was overlooked during the first visit and compare current conditions to those originally observed.	Rainy			

Source: Author

Questionnaire Survey and Samples of the Study

This survey examines visitors' satisfaction with activities and facilities at a site. A self-administered questionnaire was used, divided into three sections: Section A covers demographics; Section B assesses visitors' expectations of the activities and facilities; and Section C evaluates visitors' satisfaction with the activities and facilities. Structured questionnaires were distributed to visitors of Mangrove Point Park based on a sample size calculation using the Krejcie & Morgan (1970) formula. Since the park has not yet been in one year of operation, only the number of monthly visitors has been calculated. The approximate monthly visitor count of 40 determined a sample size sufficient to represent the population as indicated by the formula below:

$$s = X^2 \ NP(1-P) \div d^2 \ (N-1) + X^2 \ P(1-P)$$

s= required sample size
X2= the table value for chi-square for 1 degree of freedom at the desired confidence level (3.841)
N= the population sizes
P= the population proportion (assumed to be .50 since this would provide the maximum sample size)
d= the degree of accuracy expressed as a proportion (.05)

(1)

s = [(3.841) (40) (0.50) (1-(0.50))] ÷ [(0.05) 2 ((40)-1) + (3.841) (0.50) (1-(0.50))]
s = 38.41 ÷ 1.05775
s = 36.31293
= **36 sample sizes**

Based on the calculation, the study needed 36 respondents (visitors) to complete the survey to achieve an appropriate amount of feedback.

Data Analysis

Site inventory and observation underwent spatial analysis and mapping against set criteria. Questionnaire survey data were analysed using descriptive statistics, including frequency distribution and expectation-performance grids. Mean expectation-performance scores for Mangrove Point Park visitors were derived through gap analysis. Frequency analysis determined activity and facility satisfaction levels, calculating mean gaps between expectations and satisfaction. Satisfaction was assessed by comparing mean scores for perceived performance with expectations. A negative gap indicates dissatisfaction below expectations, while a positive gap indicates satisfaction meeting or exceeding expectations (Toha, 2007). The formula for determining the expectation and satisfaction mean gap is as follows:

$$\textbf{Mean Gap} = \textbf{Mean Performance} - \textbf{Mean Expectation}$$

(2)

Source: (Toha, 2007)

In summary, this analysis provides a structured approach to understanding customer expectations, perceptions, and the gaps between them, facilitating targeted efforts to enhance service quality and overall customer experience.

RESULTS AND DISCUSSION

Site Inventory and Observation: Facilities and Activities Mapping

On the first site visit, the mapping describes the location of every activity and facility available at the time, and on the second visit, the location of each item is assured. The location of the facility and the activity placement are essential prior to evaluating visitor satisfaction. It provides a contextual understanding of the environment in which visitors engage. The spatial design, accessibility, and operational efficiency influenced by the facility's location directly impact visitor flow, overall experience, aesthetic appeal, convenience, and safety, all of which are integral factors in assessing and enhancing visitor satisfaction. Site plan mapping activities and facilities spots as shown in Figure 4:

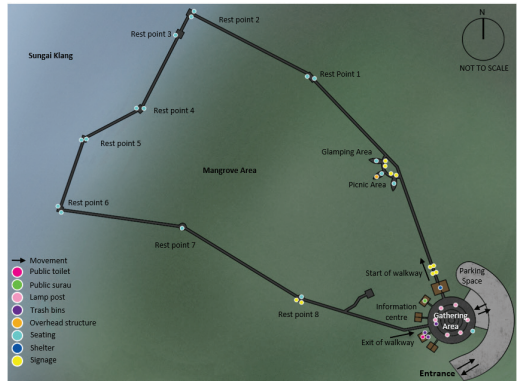

Figure 4. Mapping of Key Activities and Facilities at The Site Study
Source: Author

The mapping identifies each activity's spatial use and visitor traffic flow at Mangrove Point Park. Upon arrival, visitors park before proceeding to the central plaza surrounded by key facilities - toilets, office, surau and an

archway marking the nature walk start. Informational signs detail the site's flora and fauna. The boardwalk, about 1 km long, allows for appreciating the diverse ecosystem along with placed signs and resting spaces. Two birdwatching decks precede the exit back to the plaza. Some planned features remain incomplete due to ongoing development. However, existing elements still offer visitors a captivating experience of the mangrove beauty through strategic placement and design of activities and facilities with effective traffic flow planning.

Current Activities Identification

The developer has pledged additional activities for the site, though the required space has not been fully established as the design is still underway. Currently, Mangrove Point Park offers 7 activities: school/work trips, camping, picnics, bird watching, nature photography, nature walks, and nature education. Pending activities include fishing and river cruises. The checklist of current activities identification is shown in Table 2:

Table 2. Identification of Current Activities at Mangrove Point Park

	Activities	Mode	Intentionality	Location	Facilities
1	School/ work trip	Active	Designer's intent	Gathering Area	Parking space, public toilet, public surau, Lamp post, Trash bins
2	Camping	Active	Designer's intent	Glamping Area	Overhead structure
3	Picnic	Semi-passive	Designer's intent	Picnic Area	Seating
4	Bird Watching	Passive	Visitor-driven	Bird Watching Deck	Decking
5	Nature Photography	Semi-passive	Visitor-driven	Bird Watching Deck	Decking
6	Nature Walk	Active	Designer's intent	Walkway	Shelter, Boardwalk, Fences
7	Nature Education	Semi-passive	Designer's intent	Walkway	Signages

Source: Author

At Mangrove Point Park, 42.85% of activities are active, 42.85% are semi-passive, and 14.28% are passive. Each activity has a designated space and facilities. However, visitor-driven activities lack tailored locations. This deficiency in appropriate spaces and facilities could potentially impact satisfaction. Notably, bird watching and nature photography face

challenges. While bird watching is encouraged, a dedicated space has yet to be developed. Rest points 7 and 8 currently serve as makeshift areas, but lack facilities like quiet zones and a telescope platform to support bird watching. Similarly, the absence of a watchtower challenges nature photography. Rest points 7 and 8 are also used here, but lack facilities like a scenic view area, stable surfaces, and shelter. In essence, while these visitor-driven activities are encouraged, the lack of designated spaces and structures tailored to them, coupled with insufficient facilities, may impact activity quality and hinder optimal experiences for bird watching and nature photography in the park. To summarize, developing purpose-built areas and infrastructure is crucial for enhancing visitor satisfaction and engagement in these activities.

Current Facilities Identification and Condition

Mangrove Point Park contains twelve (12) facility types to enable user activities like nature walks along boardwalks and fences as well as nature education through signage. The checklist of current facilities identification is shown in Table 3:

Table 3. Identification of Current Facilities at Mangrove Point Park

	Facilities	Quantity	Material	Condition
1	Parking Space	No designated unit of parking	-	In good condition
2	Public toilet	1	-	In good condition
3	Public surau	1	Metal	
4	Lamp post	6		In good condition
5	Trash bins	3	Plastic with metal footing	Rusty metal
6	Overhead structure	1	Wood	In good condition
7	Seating & Benches	17	Concrete	In good condition
8	Decking	3	Wood (Not end product)	In good condition
9	Shelter	1	Concrete pillar with wooden roof	In good condition
10	Boardwalk	1km with 8 rest points	Wood / Concrete	Weathered wood Mouldy concrete
11	Fences	At the perimeter of the site	Wood / Concrete	Weathered wood Mouldy concrete
12	Signages	10	Metal	In good condition

Source: Author

Table 3 provides an overview of existing facilities at Mangrove Point Park, including details of quantities, construction materials, and conditions. These data provide context to understand visitor responses by examining factors like satisfaction with materials/ quality versus dissatisfaction with lack of quantities. The analysis explores if satisfaction/ dissatisfaction is associated more with quantities, material used, or current condition.

Questionnaire Survey

Respondent's Profile

The survey results in Table 4 show that 61.1% of respondents identify as female, suggesting women have an affinity for the park's nature and picnic activities. The largest age group is 31-40 years old at 30.6%, but those over 51 years only make up 2.8%. This underscores the importance of initiatives to appeal more to and welcome older visitors. Malays comprise 91.2% of visitors, highlighting the need for strategies to foster inclusivity and diversity. Most visitors, 91.2%, report no disabilities, indicating the park's success in accessibility.

Table 4. Identification of Visitor's Profile

S = 36 respondents			
Characteristics		**Frequency**	**Percentage**
Disability	None	31	91.2%
	Mobility impairment	1	2.9%
	Hearing impairment	2	5.9%
Awareness of park	Word of mouth	15	41.7%
	Social media	6	16.7%
	Online advertisement	3	8.3%
	Business involvement	5	13.9%
	Study involvement	7	19.4%
Travel distance	Less than 30 minutes	15	41.7%
	30 minutes – 1 hour	11	30.6%
	1 – 2 hours	2	5.6%
	2- 3 hours	2	5.6%
	3 – 4 hours	6	16.7%

Frequency of visits per month	1 time	19	52.8%
	2 times	4	11.1%
	3 times	9	25%
	More than 3 times	4	11.1%
Reason of visit	School/work trip	6	16.7%
	Picnic	3	8.3%
	Nature walks	12	33.3%
	Nature photography	6	16.7%
	Bird watching	1	2.8%
	Nature education	6	16.7%
	Camping	2	5.6%

Source: Author

The analysis found word of mouth was the most common source of visitor awareness at 41.7%. This highlights the importance of positive experiences and leveraging satisfied visitors. Many visitors live within 30 minutes, underlining the park's popularity locally due to convenience. Most visitors attend once a month, comprising 52.8%. Understanding recurring patterns offers insight into loyalty programs or annual events. Nature walks and education attracted the most interest at 33.3% and 16.7% respectively. Management can use these insights to enhance amenities, educational programs, and further satisfy visitors.

Visitors' Satisfaction with Activities and Facilities

In the survey, a rating of "3" is considered "neutral," with "1" and "2" representing "very poor" and "poor," respectively. Furthermore, the scale includes two higher ratings, "4" and "5" signifies "good," and "very good."

Table 5. Mean for Expectation and Perceived Performance of Visitors on School/ Work Trip Activity

S = 36 respondents					
Activity 1: School / Work Trip					
Dimension	Aspects	Mean Expectation	Mean Performance	Mean Gap	Measurement
Location: Gathering Area	Accessibility	4.03	4.22	+0.19	S
	Safety	4.08	4.08	0	S
	Cleanliness	3.94	4.14	+0.2	S
	Location	4.5	3.97	-0.53	DS
	Design	3.97	4.56	+0.59	S

Facility 1: Parking space	Size	3.92	4.14	+0.42	S
	Accessibility	3.89	3.61	-0.28	DS
	Quality	3.83	3.75	-0.08	DS
	Safety	4.06	3.83	-0.23	DS
	Design	3.75	3.81	+0.6	S
Facility 2: Public Toilet	Size	3.89	3.92	+0.3	S
	Accessibility	3.94	3.83	-0.11	DS
	Quality	3.89	3.83	-0.06	DS
	Safety	4.28	3.61	-0.67	DS
	Comfort	3.97	3.47	-0.5	DS
	Cleanliness	3.94	3.69	-0.25	DS
	Design	3.86	4.36	+0.5	S
Facility 3: Public Surau	Size	4.58	4.33	-0.25	DS
	Accessibility	3.75	4.22	+0.47	S
	Quality	3.92	4.19	+0.27	S
	Safety	4.17	3.39	-3.17	DS
	Comfort	3.94	3.11	-0.79	DS
	Cleanliness	3.92	4.28	+0.36	S
	Design	3.75	4.72	+0.97	S
Facility 4: Lamp post	Quantity	4.03	2.36	-1.67	DS
	Quality	3.97	3.72	-0.25	DS
	Design	3.94	3.94	0	S
Facility 5: Trash bins	Quantity	3.94	2	-1.94	DS
	Quality	3.89	3.75	-0.14	DS
	Design	3.81	4.19	+0.38	S

*Code for Measurement: S= Satisfied, DS (Dissatisfied)
Source: Author

The evaluation identified key aspects that were highly satisfying or needing improvement regarding satisfaction levels based on mean gaps. Design aspects received the highest satisfaction, notably the public surau's prayer space design with a positive mean gap of +0.97. Additionally, the gathering area and trash bin designs also received positive feedback at +0.59 and +0.38 respectively. However, safety when using the public surau emerged as the top concern with a substantial negative mean gap of -3.17, requiring immediate attention. Furthermore, the number of lamp posts and trash bins exhibited negative mean gaps of -1.67 and -1.94 respectively, indicating dissatisfaction with inadequate amounts. Improving safety, increasing lamp posts, and addressing trash bin scarcity are crucial to

enhance overall satisfaction during visits.

Table 6. Mean for Expectation and Perceived Performance of Visitors on Camping Activity

S = 36 respondents					
Activity 2: Camping					
Dimension	Aspects	Mean Expectation	Mean Performance	Mean Gap	Measurement
Location: Glamping Area	Accessibility	3.69	3.81	+0.12	S
	Safety	4	3.53	-0.47	DS
	Comfort	3.78	3.64	-0.17	DS
	Cleanliness	3.81	3.97	+0.16	S
	Location suitability	4.92	3.67	-1.28	DS
Facility 6: Overhead Structure	Quantity	3.89	3.69	-0.2	DS
	Size	3.89	3.81	-0.08	DS
	Safety	4.14	4.14	0	S
	Quality	4	4.14	+0.14	S
	Design	3.94	4.44	+0.5	S

*Code for Measurement: S= Satisfied, DS (Dissatisfied)
Source: Author

The camping site excels in visitor safety and overhead structure design. Safety measures met expectations with a 0-mean gap. The overhead structure received a +0.5-mean gap for its visually attractive design. Visitors appreciated efforts to make the experience aesthetically pleasing, contributing to overall satisfaction. However, the location's suitability for camping emerged as a major dissatisfaction area, marked by a -1.28-mean gap. This suggests current conditions related to accessibility, terrain or environment fell short of expectations for an ideal location. Additionally, a -0.17-mean gap for glamping area comfort indicated improvements were needed to enhance comfort and experience.

Table 7. Mean for Expectation and Perceived Performance of Visitors on Picnic Activity

S = 36 respondents					
Activity 3: Picnic					
Dimension	Aspects	Mean Expectation	Mean Performance	Mean Gap	Measurement

Activity Location: Picnic Area	Accessibility	3.86	3.86	0	S
	Safety	4.22	3.58	-0.64	DS
	Comfort of visitors	3.97	3.5	-0.47	DS
	Cleanliness	4	3.78	-0.26	DS
	Location suitability	4.36	3.89	-0.47	DS
Facility 7: Seating and benches	Quantity	4.14	4.47	+0.33	S
	Size	4.03	4.39	+0.36	S
	Safety of the structure	4.14	3.69	-0.45	DS
	Quality, material and condition	3.97	3.53	-0.44	DS
	Design	4.06	3.28	-0.78	DS

*Code for Measurement: S= Satisfied, DS (Dissatisfied)
Source: Author

The evaluation of satisfaction levels in the picnic area reveals noteworthy insights based on the mean gap analysis. Two aspects stand out with the highest positive mean gap, indicating that visitors are more satisfied than initially expected. Firstly, the quantity of seating and benches available surpasses expectations, achieving a mean gap of +0.33. Additionally, the size of the seating and benches also exceeds expectations, with a mean gap of +0.36. This suggests that an abundance of seating options is successfully provided, contributing positively to visitor satisfaction.

However, the evaluation also highlights areas of concern with the lowest satisfaction levels, as indicated by negative mean gaps. Safety of the seating and bench structure emerges as a significant issue, with a mean gap of -0.45. Visitors express dissatisfaction with the safety aspects of these facilities, signalling a need for improvement to ensure a secure and hazard-free environment. Another critical area of concern is the visual attractiveness of the seating and benches, with a notable mean gap of -0.78. This suggests that visitors find the design aspects lacking, indicating a substantial opportunity for enhancing the aesthetics to elevate the overall picnic experience.

Table 8. Mean for Expectation and Perceived Performance of Visitors on Bird Watching and Nature Photography Activity

S = 36 respondents					
Activity 4: Bird Watching / Activity 5: Nature Photography					
Dimension	Aspects	Mean Expectation	Mean Performance	Mean Gap	Measurement
Location: Bird Watching Deck	Accessibility	4.08	3.94	-0.14	DS
	Safety	4.28	3.78	-0.5	DS
	Cleanliness	3.92	3.94	-0.02	DS
	Location suitability	4.25	3.67	-0.58	DS
	Location suitability for photography	4.33	3.64	-0.69	DS
Facility 8: Decking	Size	3.94	4	+0.06	S
	Safety	4.17	3.89	-0.28	DS
	Quality of the material and condition	4.03	3.83	-0.2	DS
	Design	3.94	3.81	-0.13	DS

Code for Measurement: S= Satisfied, DS (Dissatisfied)
Source: Author

Visitor satisfaction levels at a nature site were evaluated based on mean gaps across aspects. The highest satisfaction was with the deck size capacity to hold visitors, with a positive 0.06 gap indicating exceeded expectations. Conversely, the lowest satisfaction involved location suitability for nature activities. Nature photography had a -0.69-gap showing significant dissatisfaction by the large discrepancy between expectation and performance. Bird watching also had dissatisfaction with a -0.58-gap emphasizing the need to improve location suitability.

Table 9. Mean for Expectation and Perceived Performance of Visitors on Nature Walk Activity

S = 36 respondents					
Activity 6: Nature Walk					
Dimension	Aspects	Mean Expectation	Mean Performance	Mean Gap	

Location: Walkway	Accessibility	4.08	4.44	+0.36	S
	Safety	4.33	3.14	-1.19	DS
	Cleanliness	3.97	3.67	-0.3	DS
	Location suitability	4.31	4.11	-0.2	DS
Facility 9: Shelter	Quantity	3.97	3.94	-0.03	DS
	Size appropriateness	3.92	4.58	+0.66	S
	Safety	4.19	4.47	+0.28	S
	Quality of the shelter material and condition	3.92	4.44	+0.52	S
Facility 10: Board Walk	Width (size)	4.14	4.36	+0.22	S
	Safety	4.36	3.31	-4.05	DS
	Quality, material and condition	4.03	3.06	-0.97	DS
	Design	3.89	3.44	-0.45	DS
Facility 11: Fences	Height (size)	4.03	2.72	-1.31	DS
	Safety	4.19	2.11	-2.08	DS
	Quality of the fence's material and condition	3.75	3.11	-0.64	DS
	Design	3.72	3.28	-0.44	DS

Code for Measurement: S= Satisfied, DS (Dissatisfied)
Source: Author

The evaluation revealed the highest and lowest satisfaction levels based on mean gaps. Visitors were most satisfied with the size of the shelter, with a positive mean gap of 0.66. Safety while using the shelter also scored well, with a positive mean gap of 0.28. Additionally, the quality and condition of shelter material demonstrated a positive mean gap of 0.52. Areas of concern included the boardwalk and fences. Safety using the boardwalk had a substantial negative mean gap of -0.45, suggesting visitors felt less secure. Safety using the fences also had a noteworthy negative mean gap of -2.08, underlining dissatisfaction. Furthermore, the quality and condition of boardwalk material revealed a negative mean gap of -0.97, indicating a shortfall in meeting expectations.

Table 10. Mean for Expectation and Perceived Performance of Visitors on Nature Education Activity

S = 36 respondents					
Activity 7: Nature Education					
Dimension	Aspects	Mean Expectation	Mean Performance	Mean Gap	Measurement
Location: Walkway	Location suitability	4.03	4.42	+0.39	S
Facility 12: Signage	Understandable	4.33	4.56	+0.26	S
	Informative	4.36	4.06	-0.3	DS
	Legible	4.36	3.08	-1.28	DS
	The signages are visually attractive	4.11	3.17	-0.94	DS

Code for Measurement: S= Satisfied, DS (Dissatisfied)
Source: Author

The Nature Education activity evaluation showed signage ease of understanding received the highest satisfaction with a mean gap of +0.26, suggesting visitors found signage clear and comprehensible, slightly exceeding expectations and positively impacting their experience. However, signage visibility from a distance saw the lowest satisfaction with a substantial negative mean gap of -1.28. This large gap indicates strong visitor dissatisfaction.

Measurement of visitors' satisfaction with activities and facilities

Table 11 reveals the final result of visitors' expectations and satisfaction based on the existing activities at the site study.

Table 11. Final Result of Visitors' Expectation and Satisfaction

Aspects	Satisfied	Dissatisfied
School / Work Trip	14	16
Camping	5	5
Picnic	3	7
Bird Watching / Nature Photography	1	8
Nature Walk	5	11
Nature Education	2	3
Summarization	30	50

Source: Author

The evaluation identified 30 satisfied aspects and 50 areas of dissatisfaction across various park activities. Dissatisfaction was found in nearly every aspect of the site. These findings emphasize the need for strategic improvements, particularly addressing safety, cleanliness, and location suitability concerns to enhance the visitors' experience.

For school/work trips, respondents were content with the accessibility, safety, and cleanliness of the gathering area but concerned about suitability. Satisfaction with the area's design was positive, but improvements are warranted for educational suitability. Regarding camping, visitors were mixed - satisfied with the accessibility and cleanliness of the glamping area but concerned about safety, comfort, and location suitability. Addressing dissatisfaction is crucial to align expectations and enhance the camping experience. Accessibility to the picnic area met expectations, resulting in satisfaction. However, concerns emerged regarding safety, comfort, and cleanliness, indicating potential improvement areas. Bird watching and photography revealed notable dissatisfaction, particularly regarding accessibility, safety, cleanliness, and location suitability. Identified gaps indicate a need for targeted improvements.

Regarding nature walks, visitors were satisfied with accessibility but concerned about safety, cleanliness, and location suitability. Attention to these aspects is essential. For nature education, the feedback was positive regarding walkway location suitability for education. Satisfaction with signage understandability was notable, although improvements are needed regarding informativeness, visibility, and visual attractiveness. Addressing these aspects will contribute to a more engaging educational experience.

CONCLUSION

In conclusion, evaluating the park's activities and facilities has provided a nuanced understanding of visitor satisfaction and identified areas needing attention. Positive aspects, such as the appealing design of gathering areas and ample seating, were acknowledged, but concerns about accessibility, safety, cleanliness, and specific design features were evident. Addressing these concerns will enhance visitor satisfaction and help attract and retain diverse visitors. Park management should focus on improving signage

informativeness, visibility, and attractiveness, and addressing issues in public toilets, surau, lamp posts, trash bins, and activity-specific locations. Enhancing suitability for field trips, picnics, bird watching, nature photography, and nature walks is crucial for exceeding visitor expectations. Prioritizing these improvements will ensure a more enjoyable experience for all visitors, fostering positive impressions and encouraging repeat visits.

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The first author designed the study and analyzed the data. The second author primarily reviewed and monitored the writing process. The third author contributed early ideas. The fourth author assisted with the literature review and provided data. The fifth author focused on research methodology, particularly descriptive statistics. All authors collaborated on finalizing and contributing to this reviewed paper.

CONFLICT OF INTEREST

The authors declare there is no conflict of interest.

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