

TOURIST SATISFACTION WITH QUALITY ATTRIBUTES OF AGRITOURISM DESTINATIONS

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Abstract

The study aims to rank tourists' satisfaction with quality attributes of agritourism destinations. Through a survey of 176 tourists at agritourism destinations in Hanoi, the study used a fuzzy approach to evaluate tourist satisfaction through the gap between expectations and perceived value of quality attributes of agritourism destinations in Hanoi. The research results show that the three indicators with the highest rankings belong to VH4 "Agriproducts", ranked second is the DT5 "Experiential Activities" and ranked third belongs to CT3 indicator "Cultural tour program". Besides, we can also see the three lowest-ranked indicators and the gap between satisfaction and expectations with a (-) sign included. Ranked at number 17 is the VH5 indicator "Monuments." Ranked at number 18 belongs to CT6 "Guide tour," ranked at number 19 belongs to DT2 "Internal amenities.""

Keywords: Satisfaction, Expectations, Perceived Value, Agritourism Destination, Fuzzy Method.

1. INTRODUCTION

Vietnam has been recognized as an emerging economy with a potential and growing tourism market. Vietnam has thousands of traditional agricultural villages, so if there is a close connection between tourism and agriculture, it can provide agricultural tourism products imbued with Vietnamese cultural identity, vibrant and diverse (Sieu, 2018). However, in Vietnam, agricultural tourism has yet to be exploited effectively; tourists mainly come to Vietnam due to the attraction of natural resources. The cause of this phenomenon is the need to improve the quality of tourism services in agricultural destinations. Some recent studies have shown that although the service quality of the tourism industry has improved, tourist satisfaction still needs to improve (Hoa & Nhung, 2022; Huan et al., 2022; Nguyen, 2021). Besides, tourists' behavior towards using tourism products has also changed many things, such as paying more attention to historical features, history, and local values of the destination (Hoang & Nguyen, 2021; Tuyet & Associates, 2021).

Quality is considered an expression of high customer satisfaction with service attributes (Stefano & Associates, 2015). Service quality synthesizes many complex attributes to grasp and measure (Udo & Associates, 2011). Satisfaction assessment is often done by comparing customer expectations and the value customers receive from the supplier (Parasuraman & Associates, 1985; Stefano & Associates, 2015; Wilkins & Associates, 2007). People and their preference judgments are often ambiguous, and it is impossible to estimate their preferences with a precise numerical value ((Ahmadi, 2017; Nguyen, 2021; Tumsekcali et al., 2021). Therefore, the fuzzy method is proposed to satisfy the accurate assessment of service quality by describing customer reviews using natural language variables, converting them into numeric form, and analyzing them through matrices. The defuzzification game aims to clarify uncertain

human assessments. In addition, the service quality evaluation model, therefore, also needs to be adjusted to be more suitable to the ongoing reality, such as the revolution of Industry 4.0 and safety considerations in disease control (Tumsekcali & al., 2021). The objective of this study is to evaluate the gap between tourists' perceived value and expectations towards attributes of agritourism destinations in Hanoi.

2. LITERATURE REVIEW

According to the World Tourism Organization, Agricultural tourism is a type of tourism activity in which visitors experience activities related to nature-based products, agriculture, lifestyle/culture ruralization, fishing, and sightseeing (UNWTO, 2008). Agritourism is visiting an operating agricultural farm for entertainment, recreation, relaxation, or education (Santeramo & Barbieri, 2015). The term agritourism describes the activities of tourists visiting a farm or agricultural facility, contemplating the farm landscape, and engaging in agricultural activities for recreational or leisure purposes.

In the world, agricultural tourism is not a new field; however, with the development of technology, agricultural tourism has had vital developments (Lane, B., 2009). Santeramo and Barbieri, 2015). The green tourism trend has increasingly attracted attention from tourists and professionals in recent years. In addition to resort and entertainment activities, tourists increasingly desire unique experiences and contribute to conservation activities through their trips. Therefore, sustainable forms of tourism, environmentally friendly destinations, and activities, of which agritourism is a typical example, will have strong development potential.

Buhalis (2000) defines a *destination* as "a combination of tourism products, providing an integrated experience for consumers." Destination attributes often make a difference in the visitor experience. Cultural and heritage attractions have become famous and essential in many destinations (Huh & Uysal, 2004). Studies have found that frequently comparing tourists' expectations and service quality at a destination yields more accurate satisfaction assessments. That gap will dictate how well the travel service matches customer expectations. It is to perform service delivery by customer expectations on a platform compatible with the level of expectations (Ahmadi, 2017; Lizarelli et al., 2021; van Quyet et al., 2015; Wahyudi, 2017).

Customer expectations are created from four sources: Information communication, personal needs, experience, Advertising, and account manipulation (Kotler & Manceau, 2012). Of the four sources, only the fourth is within the control of the application service organization. Customer satisfaction is related to service quality. The customer will be delighted if the service quality is excellent and the chronic ability exceeds expectations (Ahmadi, 2017). On the contrary, customers will be disappointed if service quality is low and satisfaction is lower than the expected value (Mahmoodzadeh et al., 2018). Agritourism has been widely studied by tourism scholars in a variety of contexts (McKercher, 2020). Much of the previous work has focused on documenting market size, the number of tourists experiencing agritourism destinations, and the economic impact of cultural heritage on destinations (Richards, 2021). In addition, the attributes of agricultural heritage tourism destinations have also been identified (Huh & Uysal, 2004).

3. METHOD

Although many studies have examined agritourism destination attributes separately and collectively, there still needs to be a clear consensus on what attributes should be present in a destination (Jumanazarov et al., 2020). Some scholars have emphasized that these attributes may vary across destinations because each has its attractions. However, the study of Huh & Uysal (2004) clearly shows the critical attributes of an agritourism destination. Therefore, the study uses destination attributes researched and developed by Huh & Uysal (2004).

Table 1: Attributes of Agritourism Destination

	Attributes	Code
1	Cultural tour program	CT1
2	Souvenir	CT2
3	Accommodation	CT3
4	Festivals/events	CT4
5	Shopping location	CT5
6	Tour guide	CT6
7	Accessibility	DT1
8	Internal amenities	DT2
9	Atmosphere	DT3
10	Information centre	DT4
11	Experiential activities	DT5
12	Farming methods	DS1
13	Rural lifestyle	DS2
14	Traditional landscape	DS3
15	Historical works	VH1
16	Local food	VH2
17	Cultural village	VH3
18	Agriproducts	VH4
19	Monuments	VH5

Table 2: Linguistics Variables and Fuzzy Numbers

Likert scale	Linguistics variable	TFN
1	Very poor	(1,1,2)
2	Poor	(1,2,3)
3	Normal	(2,3,4)
4	Good	(3,4,5)
5	Very good	(4,5,5,5)

This study developed survey questions based on a literature review and direct interviews with experts (including scientists and tourism industry leaders). The survey included 19 indicators and was conducted at agritourism destinations in Hanoi, including Ba Vi and Dong Anh districts. A total of 200 questionnaires were distributed directly to tourists by tourism students from July to August 2023, of which 20 guests have yet to respond, and six guests refused to correct the questionnaire, so the total number of survey samples in this study is 174. A simple random sampling method was applied in this study.

This study uses the formulas presented by Liu et al. (2015) and Stefano et al. (2015), including three steps as follows:

Step 1: Calculate the total score

Consider the fuzzy number A_{pin} and A_{ein} to be the perceived value and expectation of the n^{th} interviewer through indicator i .

$$TA_{ei} = \sum_1^n A_{ein} \quad (1)$$

$$TA_{si} = \sum_1^n A_{sin} \quad (2)$$

Where:

TA_{ei} : The overall expectation of indicator i

TA_{pi} : The overall perceived value of indicator i

A_{ein} : Expectation of the n th interviewer through indicator i .

A_{pin} : Perceived value of the n th interviewer through indicator i .

Step 2: Calculate the mean value

$$MA_{ei} = \frac{TA_{ei}}{N} \quad (3)$$

$$MA_{pi} = \frac{TA_{pi}}{N} \quad (4)$$

Trong đó:

MA_{ei} : The expected mean value of indicator i

MA_{pi} : Perceived value mean value of indicator i

Step 3: Calculate the gap between perceived value and expectations

The fuzzy number Gap is the distance between the expectations and perceived value of all interviewed people for indicator i .

$$\text{Gap} = MA_{pi} \ominus MA_{ei} \quad (5)$$

The integral mean method was developed by Chen & Hsieh (1999) to synthesize fuzzy numbers and is calculated as formula (6)

$$P(A) = 1/6(a+4b+c) \quad (6)$$

4. RESULTS

Formulas (1) to (6) were used to calculate the perceived value gap and expectations from all surveyed visitors for the indicators of agritourism destination attributes.

Table 3: Gap between Perceived Value and Tourists' Expectations

IC	Perceived value	Expectations	Gap	Fuzzy GPA	Gap	Ranking
CT1	(2.36, 3.41, 4.38)	(2.34, 3.39, 4.35)	(-1.99, -0.96, 2.03)	(3.40, 3.38, 18.00)	0.02	3.00
CT2	(2.31, 3.35, 4.31)	(2.30, 3.35, 4.32)	(-2.01, -0.96, 2.01)	(3.34, 3.34, 19.00)	0.00	16.00
CT3	(2.69, 3.70, 4.64)	(2.70, 3.70, 4.63)	(-1.94, -0.93, 1.94)	(3.69, 3.69, 11.00)	0.00	15.00
CT4	(2.70, 3.71, 4.60)	(2.70, 3.70, 4.59)	(-1.89, -0.89, 1.90)	(3.69, 3.68, 12.00)	0.00	9.00
CT5	(2.55, 3.56, 4.49)	(2.54, 3.56, 4.50)	(-1.95, -0.93, 1.95)	(3.54, 3.54, 17.00)	0.00	12.00
CT6	(2.72, 3.71, 4.62)	(2.72, 3.73, 4.65)	(-1.93, -0.91, 1.89)	(3.69, 3.72, 8.00)	-0.02	18.00
DT1	(2.60, 3.61, 4.57)	(2.60, 3.61, 4.58)	(-1.98, -0.96, 1.97)	(3.60, 3.60, 16.00)	0.00	13.00
DT2	(2.76, 3.74, 4.63)	(2.80, 3.79, 4.67)	(-1.91, -0.89, 1.82)	(3.72, 3.77, 6.00)	-0.05	19.00
DT3	(2.90, 3.87, 4.77)	(2.88, 3.86, 4.76)	(-1.86, -0.90, 1.89)	(3.86, 3.85, 3.00)	0.01	5.00
DT4	(3.05, 4.00, 4.86)	(3.04, 4.00, 4.84)	(-1.80, -0.86, 1.82)	(3.99, 3.98, 1.00)	0.01	7.00
DT5	(2.71, 3.71, 4.62)	(2.67, 3.67, 4.59)	(-1.88, -0.91, 1.95)	(3.70, 3.66, 13.00)	0.04	2.00
DS1	(2.88, 3.85, 4.72)	(2.85, 3.83, 4.72)	(-1.84, -0.86, 1.86)	(3.83, 3.82, 4.00)	0.02	4.00
DS2	(2.63, 3.64, 4.60)	(2.61, 3.63, 4.60)	(-1.97, -0.96, 1.99)	(3.63, 3.62, 15.00)	0.01	6.00
DS3	(2.75, 3.76, 4.69)	(2.75, 3.75, 4.69)	(-1.94, -0.93, 1.94)	(3.75, 3.74, 7.00)	0.00	10.00
VH1	(2.66, 3.66, 4.53)	(2.65, 3.66, 4.55)	(-1.90, -0.87, 1.88)	(3.64, 3.64, 14.00)	0.00	14.00
VH2	(2.74, 3.71, 4.61)	(2.73, 3.71, 4.63)	(-1.89, -0.91, 1.88)	(3.70, 3.70, 9.00)	0.00	11.00
VH3	(2.72, 3.72, 4.62)	(2.71, 3.71, 4.62)	(-1.90, -0.91, 1.91)	(3.70, 3.70, 10.00)	0.01	8.00
VH4	(2.88, 3.86, 4.74)	(2.80, 3.79, 4.69)	(-1.82, -0.88, 1.95)	(3.84, 3.78, 5.00)	0.07	1.00
VH5	(2.88, 3.86, 4.76)	(2.88, 3.86, 4.78)	(-1.90, -0.91, 1.88)	(3.84, 3.85, 2.00)	-0.01	17.00

The results of Table 3 show the gap between customer expectations and visitors' perceived value. Based on the results, the gap between expectations and perceived value at agritourism destinations is largely positive.

The top 3 indicators with the highest rankings belong to: Ranked first is the VH4 "Agriproducts" indicator with a gap of 0.07, ranked second is the DT5 "Experiential Activities" indicator with a gap 0.04: and ranked third belongs to CT3 indicator "Cultural tour program" with a gap of 0.02. Besides, we can also see the three lowest-ranked indicators and the gap between satisfaction and expectations with a (-) sign included.

Ranked at number 17 is the VH5 indicator "Monuments." Ranked at number 18 belongs to CT6 "Guide tour," ranked at number 19 belongs to DT2 "Internal amenities." Meanwhile, indicators with ratings from 4-16 all have gaps in the range from 0.00 to 0.01.

Research results show that customers have high expectations and perceptions towards indicators related to destination attributes. However, the gap between perceived value and expectation of some of these criteria still needs to be improved. This result is consistent with the research of Huh and Uysal (2004) and Jumanazarov et al. (2020). However, their research did not provide specific rankings, while these studies showed different rankings of the gap between expectations and satisfaction. This result differs from the study of Liu et al. (2015) in that indicators with low perceived ratings often have significant gaps with expectations.

5. CONCLUSION AND IMPLICATIONS

The study uses the fuzzy method to evaluate the gap between tourists' expectations and the perceived value of agritourism destinations by surveying 176 tourists at agricultural tourism destinations in Hanoi.

Research results show that the three indicators with the highest rankings belong to the VH2 indicator, the 2nd ranked distance is the DT5 indicator, and the 3rd ranked indicator belongs to the CT3 indicator. Besides, we can also see that the three indicators are ranked lowest, and the gap between satisfaction and expectations has a negative sign (-). Ranked at number 17 is the VH5 indicator, ranked at number 18 belongs to CT6, and ranked at number 19 belongs to DT2. Meanwhile, indicators with ratings from 4-16 all have positive gaps (+).

Academically, the study has shown its contribution in applying the model of agritourism destination attributes to the survey of specific tourist destinations in Hanoi. Besides, the study also confirms the science and effectiveness of the fuzzy method in research through customer reviews and supports the arguments of previous studies (Büyüközkan & Çifçi, 2012; Liu et al., 2015; Stefano et al., 2015) Research results also show similarities in some criteria of customer evaluation of agritourism destination attributes of the studies such as Huh and Uysal, (2004) and Jumanazarov et al. (2020). However, some research results also show differences with the study of Liu et al. (2015).

Research shows that destination managers must highlight distinctive elements for applications to agritourism destination management and destination communication activities of Vietnamese agricultural culture, such as farming methods, agricultural products, festivals, events, and traditional agricultural landscapes. In particular, tourism program designers need to emphasize cultural elements in tourism programs.

In addition, administrators and tourism training institutions need to focus more on improving tour guides' agricultural knowledge and presentation skills while serving tourists' calendars at cultural destinations. Recommendations related to technical facilities inside destinations are also shown in the results of this study. Tourists show they are unsatisfied with the conditions and amenities inside cultural heritage sites in Hanoi.

Despite its academic and applied contributions to destination management, the research still has specific limitations, such as the fact that it was only conducted in Hanoi. The research method only compares the gap between satisfaction and expectations of the attributes of agritourism destinations, so the ranking still needs to be clarified. Future studies can be expanded to other cities nationwide and use some other fuzzy tools to clarify research results, such as FAHP and TOPSIS.

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