

# Management of logistics elements affecting the satisfaction of community-based tourism Case Study of Ban Koh Samet, Chumphon Province, Thailand

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## ABSTRACT

The purpose of this research were analyze logistics management effecting to the tourism satisfaction of Bann Koh Samet. The sample group were tourists who came to traveling and visit in Bann Koh Samet, Chumphon province. For data analysis using descriptive statistic include, Frequency Percentage, Mean, Standard Deviation, and Structural equation model with Empirical data.

The result was found that hypothesis was shows that the consistency between the modified model was more consistent empirical data based on the consistency index value  $\cdot 22=0.900$ ,  $df = 400$ ,  $GFI = 1.000$ ,  $AGFI = 0.999$ ,  $CFI = 1.000$ ,  $NFI = 1.000$ , and  $RMSEA = 0.00$  which had a pass value of all criteria, which is 0.900 that greater than 0.05, indicating that the theoretical model was consistent with the empirical data

## Keywords

Satisfaction, Logistics, Community Tourism

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## Introduction

The domestic tourism industry is considered one of the most important and constantly evolving industries affecting the tourism economy greatly in terms of the development of tourist attractions, business development to become a tourism network, tourism styles which have changed including the changing environment causing tourists' behaviors to adjust. In addition, at present, the styles of the New Normal tourism that takes place after the COVID-19 situation affect the tourism management, tourist attractions, and the ability to travel. As a result, all sectors have to pay attention to tourism development in order to meet their needs, expectation, and competition in the tourism sector. This is important to create a community-based tourism because it is to bring the identity, form, culture, and natural resources available in each attraction to be managed and make the difference to develop the tourism. This includes the development of tourism personnel as well as preparing for tourism. In the past, Thailand has been popular and is a destination of travel for foreign tourists who popularly choose tourist destinations in Thailand and are ready to travel to Thailand again.

Regarding the domestic tourism situation according to the data from the Ministry of Tourism and Sports in 2019 during August – December, there were 100,737-147,439 tourists visiting Chumphon Province and the income from Thai visitors was between 516.3 - 599.3 million baht. Tourism is one of the industries that can generate a lot of income into the country. The government has continued to emphasize the tourism industry. This can be clearly seen from public policies promoting tourism such as the National Economic and Social Development Plan, government policy, the national strategy on tourism, province and provincial group strategies, etc. To support tourism, the

government has promoted and supported various types of tourism such as natural and environmental tourism, agricultural tourism, ecotourism, cultural tourism, health tourism, etc.

Chumphon Province is a province with a wide variety of natural resources in terms of seafood, food, and tourist attractions. There is also the period to organize the activities on the development of OTOP inno-life tourist attractions, Chumphon Province, comprising 8 districts with not less than 35 locations of selected and developed tourist attractions, integrated agricultural management, learning management, and building of strong tourism community. The approach to tourism management of OTOP inno-life is to encourage the application of local identity in combination with the development of tourism products and services to achieve the development of competitiveness based on tourism. The Koh Samet community has an area context of the interest of various resources along with the leadership's management and participation in community tourism management which is outstanding and interesting. The tourism management is planned and the government agencies provide continuous support. Therefore, the researcher is interested in studying the management of the logistics elements affecting the satisfaction of the community-based tourism to be a guideline for further development of community tourism.

## Research objective

To study the area context, satisfaction, logistics management, and analysis of logistics management on the satisfaction of Ban Ko Samet community-based tourism.

## Literature Review

Tourism is a journey with specific purpose. There are 5 components of tourism; Accessibility, Accommodation, Attractions, Activities and Tourist Activities, and Recreational Activities on all miscellaneous services available to tourists (Ancillary). According to Community Tourism Institute (2009), World Tourism Organization (2001), Hamzah, & Khalifah (2009), the community-based tourism is a community development tool that strengthens local communities' ability to manage tourism resources which ensures participation in tourism management of the local community. The community-based tourism helps localities generate income, conduct a variety of economic activities, preserve culture, conserve the environment, and provide educational opportunities. In addition, the

community tourism may also provide local residents with alternative means of earning money as a way of poverty alleviation. Thus, the logistics management model has played an important role in promoting tourism management.

Tourism logistics means the management and coordination between activities to make the flow of tourists from the sources of origins to the destinations without error and still be able to get maximum satisfaction. The logistics for tourism covers three major areas; transporting tourists and objects (physical flow), giving and receiving information (information flow), and receiving payments (financial flow). In terms of transportation for tourism, it covers only the matters of transporting tourists and objects.

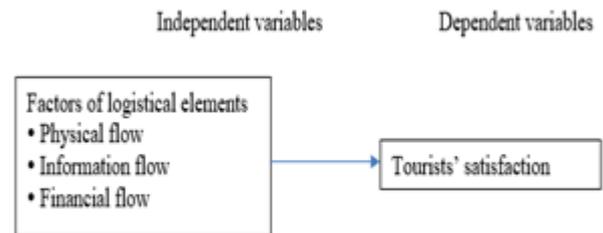
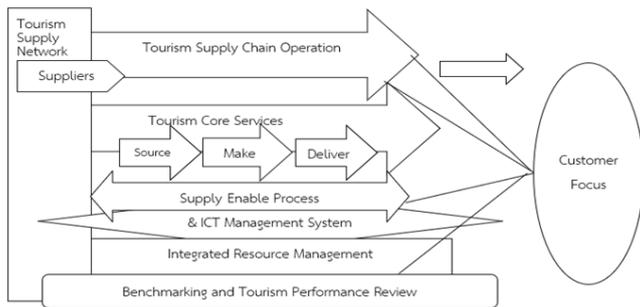


Figure 1.1 Research's conceptual framework

Source: Kaosa-ard, Mingsam and Korsan Surya. 2009. An Analysis of Tourism Logistics in Tourism City. Chapter 5 in Integrated Development of Sustainable Tourism in the Mekong Region 3. Chiang Mai: Social Research Institute, Chiang Mai University.

In term of logistics tourism, things to be aware of in the tourist service framework are related to 3 areas of flow, namely, physical flow, information flow, and financial flow. The Physical Flow means traveling of tourists, tourist transport, transporting luggages of tourists, and the convenience of traveling. The Information flow here means the provision of tourist information, road signs, site signs, on-site guidance, and warnings for being careful, etc. The Financial Flow includes the convenience of payment for goods or services, travel and the purchase of various travel tickets. The analysis is divided into 3 stages; the stage of traveling into the tourist city, the stage of staying in tourist city, and the stage of departure from the tourist city

It can be said that the flow of logistics management can lead to a more satisfying tourism management because the tourists can get a service that meets the expectations of the logistical elements whether in the physical flow, information flow, and financial flow. The review of related concepts, theories, and research leads to the research's conceptual framework as below

### Research Methodology

This is the quantitative research. The population used in this research consists of tourists who come to Ban Ko Samet community, Pathio District, Chumphon Province. The key informants are tourism operators, representatives from government agencies involving in tourism regulation and academicians. The sample group used in this research were suitable for analyzing structural equation model. According to the recommendations of Comrey and Lee (1922) and Thanin Sinjaru (2012), a total sample size of 400 subjects was determined for data collection in this research. To select samples for this data collection, the researcher determined accidental sampling by using the questionnaires that were tested for the Validity and the Reliability. The data analysis was done by using the descriptive statistic consisting of frequency, arithmetic mean

( $\bar{x}$ ), standard deviation (SD), and percentage. The statistics were used to test the hypothesis and analyze the structural equations with values used to verify harmony and consistency of structural equation models with empirical data

### Results

#### Concepts of satisfaction

Cadotte ER, Woodruff RB, Jenkins RL (1987), Pearce & Coghlan (2008), Pearce (1988), and Panassaya Sirirungrotekanok, 2016, mentioned that satisfaction or achievement of expectations may depend on whether the person values or underestimates the outcome of that expectation. The satisfaction depends on preference and feeling. The travelers expect to be responded with various experiences to achieve satisfaction. Zeithaml, Parasuraman, and Berry (1990) and Thanakrit Suthinanthachote (2016) has defined 5 aspects of service quality known as SERVQUAL to measure customer satisfaction; Tangibles, Reliability, Responsiveness, Assurance, and Empathy.

The general data revealed that most of the tourists of 206 persons were male (51.5). They were mostly 25-30 years old for 156 persons (39.0). The most education level was bachelor's degree for 189 persons (47.3). Most of them were government officials/state enterprise officers for 126 persons (31.5) with an average monthly income of 25,001 - 30,000 baht for 115 persons (28.8).

Table 1 Opinions of tourists towards logistic elements of Ban Koh Samet community-based tourism n=400

Logistic elements of Ban Koh Samet community-based tourism	Level of opinions			
	$\bar{x}$	S.D.	Level	No.
<b>1.1 Physical flow</b>				
1. Public transport in traveling	3.56	1.070	Much	4
2. Sufficient parking places	3.97	.783	Much	2
3. Convenience of travel	3.99	.753	Much	1

Table 1 Opinions of tourists towards logistic elements of Ban Koh Samet community-based tourism n=400

Logistic elements of Ban Koh Samet community-based tourism	Level of opinions			
	$\bar{x}$	S.D.	Level	No.
<b>1.2 Information flow</b>				
1. Precision of information about tourist attractions (accommodation, food, drink)	4.06	.741	Much	1
2. Detailed information received upon arrival at the tourist attraction	3.88	.737	Much	4
3. Tourist attractions with road signs and clear introduction	4.04	.700	Much	2
4. Provision of information via various channels of internet and social media	3.96	.798	Much	3
<b>Total</b>	<b>3.98</b>	<b>.580</b>	<b>Much</b>	<b>1</b>
<b>1.3 Financial flow</b>				
1. Ability to use modern payment methods	4.05	.954	Much	2
2. Ability to use the ATM service	3.78	1.030	Much	4
3. Quick payment system for goods and services	4.30	.807	Much	1
4. Payment of travel expenses for tourism	3.90	.931	Much	3
<b>Total</b>	<b>3.97</b>	<b>.644</b>	<b>Much</b>	<b>2</b>

Table 3 Satisfaction of tourists in traveling to Ban Koh Samet community n=400

Level of tourists' satisfaction	Level of opinions			
	$\bar{x}$	S.D.	Level	No.
1. Satisfaction with the physical experiences	3.75	.802	Much	4
2. The community is reliable and suitable for word-of-mouth.	3.94	.775	Much	3
3. Satisfaction with what corresponds to traveling	3.65	.883	Much	5
4. Have confidence in receiving service and care	3.98	.828	Much	2
5. Friendliness given to tourists	4.14	.824	Much	1
<b>Total</b>	<b>3.8</b>	<b>.633</b>		<b>9</b>

Table 4 Analysis on the relationships among independent variables

Tourist logistic elements	Physical flow (X1)	Information flow (X2)	Financial flow (X3)
Physical flow (X1)	1	.567	.371
Information flow (X2)		1	.473
Financial flow (X3)			1

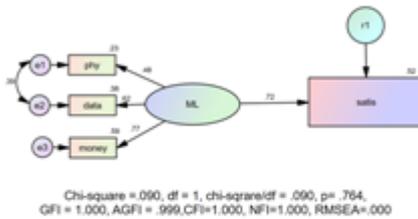


Figure 1 Results of analysis on the structural equations based on the hypotheses showing the logistic management components affecting the satisfaction of tourists in Ban Koh Samet community-based tourism

Table 5 Results of analysis on the indices used in verifying the consistency and harmony of the variables and the empirical data

No.	Value	Criteria	Obtained value	Results of consideration
1	$\chi^2$	$0.05 < p < 1.00$	0.900	Pass the criteria
2	$\chi^2/df$	$0.00 < \chi^2/df \leq 5$	0.900	Pass the criteria
3	GFI	$0.90 < GFI \leq 1.00$	1.000	Pass the criteria
4	AGFI	$0.90 < AGFI \leq 1.00$	0.999	Pass the criteria
5	CFI	$0.95 < CFI \leq 1.00$	1.000	Pass the criteria
6	NFI	$0.90 < NFI \leq 1.00$	1.000	Pass the criteria
7	RMSEA	$0.00 \leq RMSEA \leq 0.08$	0.000	Pass the criteria

Table 6 Element weight value of the latent variables to the observable variables of independent variables (X3)

Latent variables	Observable variables	Element weight value
1. Logistics management (ML)	1.1 Physical flow	0.48
	1.2 Information flow (Data)	0.62
	1.3 Financial flow (Money)	0.77

## Discussions

The results of the study on the management of logistics elements affecting the satisfaction of community-based tourism: Case Study of Ban Koh Samet, Chumphon Province, Thailand, revealed that Tourism Logistics elements covered Physical Flow, Information Flow, and Financial Flow to create the Availability, Accessibility, and Information. This was correspondent with Wassana Jaroon et al. (2017) giving the opinions on the processes or activities in moving products or services to consumers in an efficient and effective manner as well as providing services and related information. This was the management of internal flow of physical flow, information flow, and financial flow. It was the same approach as Chanisa Maneerattanarunroj et al. (2018) seeing that the management of logistics elements could make the movement of goods or services, information and money in the supply chain to benefit the economic system. This was in line with Zeithaml, Parasuraman, and Berry (1990) viewing the SERVQUAL influencing Responsiveness, Empathy, and honoring the service users. It also agreed with Kamonchanok Khamaon (2017) and Chiranan Khermkhan et al. (2017) stating that the acknowledgement of news (news source, type of received news) could be satisfactory on tourism services. This was consistent with Chalita Triyawanich and Eknaree Thumpon (2019) finding that tourists were satisfied with the overall management of logistics elements at a good level. There should be tools to encourage tourists to travel to the attractions more easily by facilitating safely. There should also be the gathering of

groups of persons or agencies involved to promote knowledge on logistics to support tourism activities along with the agencies responsible for this area directly. It also agreed with Chairit Thongrod (2016) finding that the tourists were most satisfied with the flow of information, comfort received from tourism, and access to tourist attractions. The areas that tourists are very satisfied with are tourist attractions, financial flow, and physical flow, respectively. It was similar to the study of Thanaphat Thachaphan (2016) finding that tourists were very satisfied with logistics, physical tourism and marketing promotion elements. It was in accordance with Nopporn Buain and Nattha Sawetnarakul (2019) finding that the logistics management of physical flow and information flow was in the same way as Prachuap Chanmuen (2019). It was found that some aspects of the tourism logistics system were unavailable causing the driving of tourism policy linking Thailand – Laos could not be developed at the full potential. The cooperation was still not in full efficiency. The policy of seamless connection between the Thai government and the Lao government would be delayed.

#### Research recommendations

1. The tourism community should have a financial management system that is convenient and flexible in the use of services. In addition, public relations and information should be provided to enhance efficiency in management and tourism.

The agencies involved in the management of tourism activities should play a role in supporting tools and technologies for improving and developing tourism for efficiency

#### References

- [1] Kamonchanok Khamaon. (2017) studied the satisfaction of South Korean tourists with Ayutthaya Historical Park. *Academic Journal of Pathumthani University*, 10th Year, Volume 1. Master of Arts Program, Kasetsart University.
- [2] Chiranan Khermkhan, Panya Mankeb, and Anon Klanklon. (2017). Satisfaction of tourists with the agricultural tourism supply chain, Rayong Province. *Journal of the Graduate School of Pichayathat*, 14th Year, Volume 1, Faculty of Agricultural Technology King Mongkut's Institute of Technology Ladkrabang, Ladkrabang District.
- [3] Chanisa Maneerattanarungroj et al. (2018). Tourism logistics affecting tourist satisfaction at Khao Yai National Park. *Journal of Interdisciplinary Studies*, 18th Year, Volume 2. Faculty of Humanities and Social Sciences. University of Technology Suranaree.
- [4] Chalita Triyawanich, Eknaree Thumpon. (2019). Logistics Management for Tourism in Muang District, Phra Nakhon Si Ayutthaya Province. *Academic Journal of Bangkok Thonburi University*, 8th Year, Volume 1.
- [5] Chairit Thongrod. (2016) Management of historical and cultural tourism logistics in Nakhon Pathom Province. *Social Sciences Doctoral Journal (Humanities and Social Sciences)* 6th Year, Volume 1. College of Logistics and Supply Chain of Suan Sunandha Rajabhat University.
- [6] Thanakrit Suthinanthachote. (2016). Satisfaction of Thai tourists in Than Sadet National Park - Koh Phangan, Surat Thani Province. Thesis, Business Administration Program Hat Yai University.
- [7] Thanaphat Thachaphan. (2016) Guidelines for the Development of Tourism Logistics in Tarutao Islands, Satun Province. Program in Logistics Management, Master of Business Administration, Mae Fah Luang University.
- [8] Thanin Sinjaru. (2012). Research and statistical analysis with SPSS and AMOS (13th edition). Bangkok: Business R&D.
- [9] Nopporn Buain, Nattha Sawetnarakul. (2019). Optimization of Tourism Logistics Elements in Phra Nakhon Si Ayutthaya Province. *Humanities Journal*, 20th Year, Volume 3. Faculty of Business Administration, King Mongkut's University of Technology North Bangkok Rayong Campus.
- [10] Prachuap Chanmuen. (2019). Tourism logistics system connected along the Thai-Lao Mekong River, a case study of Mukdahan-Savan-Seno and Nakhon Phanom-Thakhek Special Economic Zones, *Journal of Public Administration*

- and Politics, 8th Year, Volume 1 (January – April, 2019).
- [11] Panassaya Sirirungrotekanok. 2016. Behaviors and satisfaction of Thai tourists towards tourism logistics management, a case study of Amphawa Floating Market, Samut Songkhram Province. Master of Science Thesis in Logistics and Supply Chain Management, Faculty of Logistics, Burapha University.
- [12] Wassana Jaroon et al. (2017). Efficiency of logistics management of tourist attractions in Kamphaeng Phet Province. *Journal of Modern Management Science*, 10th Year, Volume 2 July – December, 2017.
- [13] Comrey, A. L., and Lee, H. B. (1992). *A first course in factor analysis* (2nd ed.). New Jersey: Erlbaum.
- [14] Cadotte, E. R., Woodruff, R. B., & Jenkins, R. L. (1987). Expectations and norms in models of consumer satisfaction. *Journal of Marketing Research*, 24(3), 305–314. <https://doi.org/10.2307/3151641>
- [15] Fongtanakit, R., Somjai, S., Prasitdumrong, A., & Jermisittiparsert, K. (2019). The Determinants of the Medical Tourism Supply Chain of Thailand. *International Journal of Supply Chain Management*, 8(6), 291-300.
- [16] Jermisittiparsert, K. & Chankoson, T. (2019). Behavior of Tourism Industry under the Situation of Environmental Threats and Carbon Emission: Time Series Analysis from Thailand. *International Journal of Energy Economics and Policy*, 9(6), 366-372. DOI: 10.32479/ijeep.8365.
- [17] Jermisittiparsert, K., Joemsittiprasert, W., & Phonwattana, S. (2019). Mediating Role of Sustainability Capability in Determining Sustainable Supply Chain Management in Tourism Industry of Thailand. *International Journal of Supply Chain Management*, 8(3), 47-58.
- [18] Pearce, P.L. and Coghlan, A. (2008). The dynamics behind volunteer tourism. *Journeys of discovery in volunteer tourism: International case study perspectives*, pp. 130-143.
- [19] Parasuraman, A., Zeithaml, V.A., and Berry, L.L. (1988). SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing*. 64(1): 12-40.
- [20] Parasuraman, A.,V. Zeithaml, and L.Berry(1990).‘An empirical examination of relationships in an extended service quality model.’ *Marketing Science Institute Research Program Series, Report No.*, pp. 90–122.
- [21] Piboonrunroj, P., & Disney, S. M. (2009). *Tourism Supply Chains: A Conceptual Framework: Logistics Systems Dynamics Group*. Cardiff: United Kingdom
- [22] Zeithaml,V.A.Parasuraman, A,&Berry,L.L.(2009). *Delivering Quality service: Balancing customer perceptions and expectations*. New York: The Free Press