

Sustainability Indicator Analysis of Creative Tourism by Using the Delphi Technique: Case Study of Creative Tourism in Nakhon Si Thammarat Province, Thailand

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Abstract

The purpose of this research was to determine the indicators used for analyzing the sustainability of creative tourism in Nakhon Si Thammarat province, Thailand, and to propose the guidelines for sustainable management. This research was carried out by mixed methods. The researcher used the Delphi Technique to determine the sustainability indicators from 21 experts, and 10 indicators were selected from 3 sustainabilities to be designated for the questionnaires. The qualitative data was collected from 50 tourism entrepreneurs and the quantitative data was collected from 400 tourists, both Thai tourists and foreign tourists. The research results revealed that the creative tourism in Nakhon Si Thammarat province had the management in accordance with the sustainability guidelines of creative tourism, had the highest social and cultural sustainability, and should be enhanced and develop other indicators further. There were interesting points in all 3 dimensions for the sustainable development such as to emphasize the crucial problem solving, which was, waste management, to promote the admission fees for tourist attractions, to select the local materials, to employ local labor, manage reasonable wages, develop labor skills, participate in the cultural activities of localities, exchange experiences and apply all suggestions from the tourists for developing tourist attractions to meet the tourists' needs, and develop the basic public utilities not against the community livelihoods.

Keywords: Creative Tourism; Delphi Methods; Dimensions; Indicators; Sustainable.



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1. Introduction

Tourism is really crucial for the economic and social development of the country (Hrubalová and Palenčíková, 2017; Jordan, 2012; Maria, 2016), and it has become the fastest growing industry in the economic systems of the world (Baker, 2013; Maria, 2016; Yazdi, 2012). In 2017, the tourism industry in Thailand generated incomes of around 2.75 trillion baht (Svetarundra, 2018). The tourists' expenses on various activities during their travel could create jobs and incomes for people in every sector (Huang *et al.*, 2012; Joshi, 2012b).

All tourist attractions try to adapt themselves to meet the needs of new tourism markets (Stipanović and Rudan, 2014). Cultural tourism helps the community to uniquely expand its customers based on the existing tourism resources and reflects and supplements the community livelihood in a positive manner. (Patuelli *et al.*, 2013). Nakhon Si Thammarat province is considered an ancient city with a long history and is significant in terms of religion, economy, society, government, and politics. The size of the city is ranked number 16 in Thailand (Nakhon Si Thammarat Administration Office, 2017). It has varied tourism activities because of its potentials in terms of livelihoods, cultures, and natural resources. There was historical evidence during the 13th century that mentioned the prosperity of Buddhism and the civilization construction which reached both political and commercial peak (Noonsuk, 2013). Furthermore, this city has Wat Phra Mahathat, the temple which was approved as a tentative list the world cultural heritage (United Nations, 2013). In 2016, there were a total of 3,565,814 tourists traveling to this province (Nakhon Si Thammarat Administration Office, 2017) and the tendency was increasing continuously. After that, the tourists scattered to visit various tourist attractions within the province. It is regarded as a strength which benefits the tourism development in Nakhon Si Thammarat province, including the opportunity from the government policies that promote the tourism in Thailand to enable the tourists to perceive the tourism variously and be ready to become an Asian Gateway completely (Svetasreni, 2012) by proposing the model of creative tourism in order to create the new alternatives in the areas of tourist attractions. According to eliciting the outstanding points from the locality to increase the alternative area groups, to support the tourists' distribution, and bring the variety of tourism to newly developed tourist attractions, by creating the specific characteristics of each newly developed tourist location, these can keep the previous tourist attractions to reach sustainability (Bhudhakosa, 2011). Hence, the research has an opinion that the suitable management of creative tourism will be able to construct the sustainability to the tourist attractions.

2. Objectives of Study

To determine the indicators for analyzing the sustainability of creative tourism in Nakhon Si Thammarat province, Thailand, and to propose the guidelines for sustainable management.

3. Literature Reviews

3.1. Creative Tourism Concept

Creative tourism was firstly originated between 1999 – 2000 (B.E. 2542 – 2543) inspired by the tourism experiences in Asia. Creative tourism is a tourism which opens an opportunity to the travelers to develop their own potentials and creativity through the participation in the learning of activities by real experiences according to the specific characteristics of the goal areas where they have visited (Richards and Raymond 2000). Moreover, creative tourism is a tendency of new tourism which opens the opportunity to the tourists to respond to the culture, society, and environment, by using the direct experiences with the folklores or activities owners (Wisudthiluck *et al.*, 2017). Besides, creative tourism can be defined as a type of tourism which enhances more widely the cultural survey, increase the circulation to more interesting, and be different from other tourist destinations (Carvalho *et al.*, 2016). For this creative tourism, the tourists have the responsibility of their own to learn about their environments they found, and apply the knowledge to develop the skills of themselves (Richards and Wilson, 2006). Creative tourism is also a tourism enhancing the livelihood of the community to reach the sustainability (UNESCO, 2008). Regarding creative tourism, the tourists participate and have an opportunity to exchange the creative ideas and learning experiences, and have interactions with each other to learn and understand the daily life of the community and transfer the experiences with the local community. Thus, both tourists and community get knowledge and experiences mutually.

In Thailand, creative tourism is categorized into 4 major types as follows: 1. Cultural Heritage, 2. Lifestyles, 3. Arts, and 4. Functional Creation (TAT, 2014). When bringing the creative tourism concept to apply to sustainable development, it has to realize the major point; 3 aspects of tourism sustainability, which include, economic aspect, social aspect, and environmental aspect (Chirilă *et al.*, 2018; Thongsamak *et al.*, 2013; Todorov and Marinova, 2011). The purchase behaviors, attitudes, and financial integration in each business will be different depending on the size and characteristics of each local market (Stoeckl, 2007). The tourism plan has to be driven within the locality and focus on the linkages among the cultures, resources, and livelihood of the community itself (Fernandes, 2011). Sustainable development will be good when it comes through changing and learning process (Farrell and Twining-Ward, 2005).

Creative ideas have become the specific topic for tourism (Perederenko, 2015). Creative ideas are regarded as an important part to increase all novel things in the existing tourism products (Stipanović and Rudan, 2014) in the long term. The competition of tourism sections relies on the developmental sustainability in each tourism section (Vellecco and Mancino, 2010), however, the primary reasons which cause the entrepreneurs to not accept the sustainable development are mainly due to the high costs of investment and uncertain investment return (Fotiadis *et al.*, 2013).

Culture directly affects tourism (Zadel and Bogdan, 2013). Generally, the concepts about social and cultural sustainability are about constructing and keeping the quality of life appropriate to the people in the community (Puvaneswaran *et al.*, 2017). Some incomes derived from tourism can be allocated for recovering and maintaining the tourist attractions to be in a consistently balanced state (Weaver, 2008). With the growth of arts and cultures in the tourist attractions, it will become the resource of employment, taxation, and economic activities (Greenberger and Levitz, 2013). Creative tourism is increasingly popular by the creation of cultural and traditional charms through their own locality (Glavonjić *et al.*, 2017).

3.2. Sustainable Tourism in Nakhon Si Thammarat, Thailand

When comparing all provinces in Thailand, Nakhon Si Thammarat has various tourism resources scattered throughout the districts that facilitate tourism. Furthermore, the province has potentials to develop creative tourism with its existing resources if a suitable plan and management is implemented. The process of sustainable development should be coordinated at the national level driven by the government (Chirilă *et al.*, 2018) in order that the creative tourism in the community can really happen. Sustainable creative tourism has to rely on the balance of 3 sustainable dimensions, which include, economic, social-cultural, and environmental sustainability (Chirilă *et al.*, 2018; Thongsamak *et al.*, 2013). If the tourist attractions focus too much on business benefits and are open to excessive tourists in the short term, it might neglect the environmental management which can change the community's livelihood until it becomes to destroy the tourist attractions instead. However, if only emphasize excessive social-cultural aspect without considering the management of well-being, or without accepting tourists in suitable quantity, this also might cause the community to lack sufficient incomes. According to the research of (Amalia and Doru, 2012), it was found that the growth of incomes occurring by new jobs from tourism activities can improve the livelihood standard of local people. In addition, the study of (Ong Puay, 2017), it shows the most important problems in management and development is the lack of consultancy from authorities and participative decisions of the community. It is in accordance with the research of (Poudel, 2014) which mentions the qualitatively mutual work between the stakeholders is essential for effective management through tourist attractions. Therefore, it can be concluded that participation from the community stakeholders is an essential factor for organizing the creative tourism sustainably (Buaban, 2016; Ong Puay, 2017; Poudel, 2014; Winita and Thirachaya, 2013). For this reason, all government sectors, private sectors, and local stakeholders have to realize the significance of sustainable

management especially the creative tourism management in various tourist attractions scattered throughout in Nakhon Si Thammarat province, thus it is unavoidable that the community members and local administrative organizations should participate in managing this tourism. Hence, the management of sustainable creative tourism is concerned as a crucial guideline for building the economic balance, maintaining the local society and cultures, including identities, without affecting the environmental states of the tourist attractions.

3.3. The Delphi Methodology

The Delphi Technique was developed by RAND Corporation in 1953 (B.E. 2496) (RAND Corporation, 2014) to study and analyze the potential knowledge bases of various sciences. It is the fastest application for potential prediction (Adler and Ziglio, 1996; Hai *et al.*, 2014; Kezar and Maxey, 2016; Strasser, 2017). Furthermore, it focuses on the depth research to perceive future time better (Helmer-Hirschberg, 1967; Makkonen *et al.*, 2016). According to the benefits of the Delphi Technique, it shows the capability of experts' participation and presents the structured process of group communication (Toppinen *et al.*, 2017). In the case of identifying the crucial qualifications of the social and operational communication, the Delphi process allows the participants to propose sensible arguments and share their numerous opinions to lead to the concept of social communication. This method helps us participate in these regulations. Even during the process of repeated response, the participants are able to read and consider the experts' views carefully and over again. (Izaryk and Skarakis-Doyle, 2017; Skinner *et al.*, 2015).

Miller (2001), mentioned the Delphi Technique that it is the use of the decision process by the group of people. It is more accurate than the decision which comes from individuals. Particularly, if the selected experts in the group are knowledgeable and skillful in that certain issue, the decision making will be more accurate. In addition, if the expert who gives the response has no face to face communication among the group members, it can reduce the effects from influence, personal bias, and prejudice towards the thoughts of the group. The crucial characteristics of the Delphi Technique are that it never exposes the names or personal information of the informants, and the information is collected repeatedly several times for getting the precise and accurate information, including the feedback technique, got from the performer (Skinner *et al.*, 2015; Strasser, 2017). Moreover, the responses conclusion of the group is done by the statistical process. The steps of the Delphi Technique use can be divided into 4 steps as follows: 1. Plan of data collection and scope of contents, 2. Selection of experts or informants, 3. Data collection, and 4. Result report. The size of the informants' group depends on the informants' characteristics and researchers' consideration. For a number of experts who respond to the questionnaires, it is not fixed. Nonetheless, Thomas T. Macmillan studied and proposed his research according to the Delphi Technique, and got the conclusion on the appropriate numbers of the experts or informants that if the experts or informants used were 17 persons up, the decreased rate of errors will be much little (Macmillan T. T., 1971a). Therefore, most of the researches done by the Delphi Technique will use the experts or informants for a number of 17 persons. However, the researcher can use the experts less than this depending on the appropriateness of the research design and the experts themselves who mutually answer the questionnaires, but the reduction rate of the errors will be higher. The data collection will carry out not more than 4 times. This process will stop when the research response is being done and the data is exchanged sufficiently (Skulmoski *et al.*, 2007).

4. Methodology

4.1. Finding the Sustainability Indicators of Creative Tourism

The instrument used in this research for considering the sustainability indicators of creative tourism includes questionnaires for data collection by the Delphi Technique. The researcher collects the data 3 times totally (Näyhä, 2012). For this research, 21 specific skilled experts were selected by Purposive Sampling method.

4.2. Sustainability Analysis of Creative Tourism

The researcher took the indicators determined from the Delphi Technique to collect the data by collecting in the economic dimension. The interview was done through the stakeholders in creative tourism activities. The total of 50 samples was got and the data was concluded in terms of the social-cultural and environmental dimensions. The questionnaires used were scored by using the Likert Scale (Croasmun and Ostrom, 2011; Hartley, 2014; Stoklasa *et al.*, 2017). The scores criteria for measuring the variables were calculated by using the relating researches of both domestic and foreign countries as a guideline and adjusted to be appropriate to the language use, and the 7 points scale was used (Stipanović and Rudan, 2014) towards 400 tourists, both Thai and foreign tourists. The data was analyzed by using SPSS program.

5. Data Collection

Concerning sustainability indicators of creative tourism, the researcher selected 47 qualified experts concordant with criteria determined. After that, the researcher coordinated and informed the steps of research and the consideration of indicators to the experts selected via emails. There was a totality of 28 experts who accepted to participate in this research, hence the researcher delivered the invitation letters for being the experts of indicators consideration for creative tourism, including delivered the 1st questionnaire altogether. After delivering the questionnaire to the experts, some experts asked for additional documents and needed more explanations before considering the indicators for correctness and clarity through the research scopes. However, some experts asked to withdraw from this participation because they had considered that they did not have the readiness to participate in

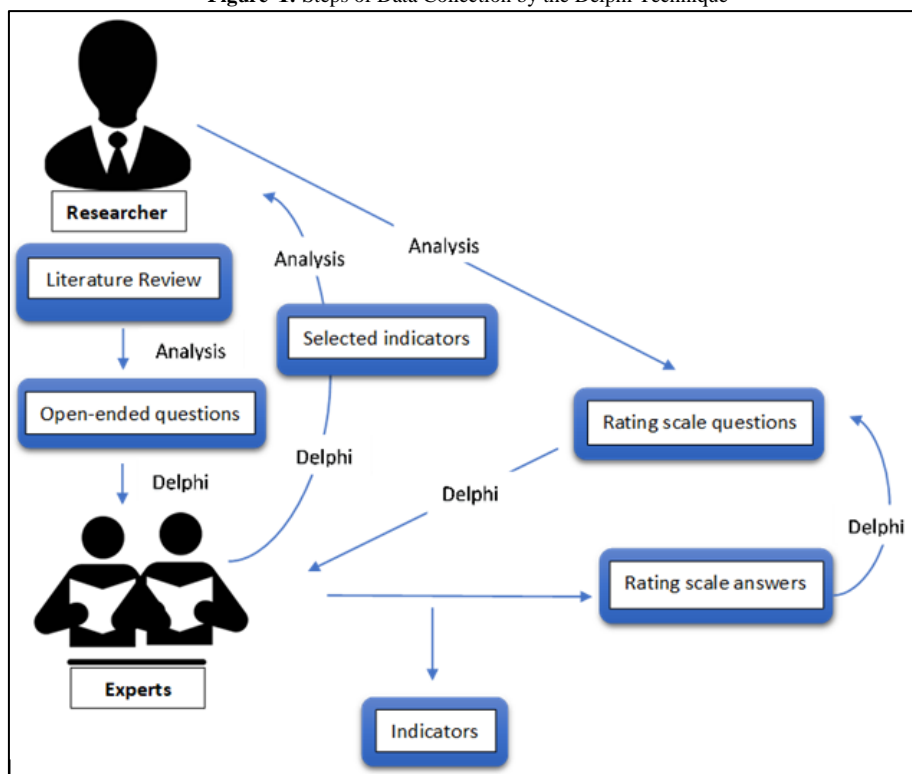
responding to the questionnaires many times due to their own missions and they were afraid to become the cause to make the research delayed. Furthermore, some experts read the questionnaire and found they were not knowledgeable or skillful according to the research topic. Hence, the researcher specially collected the data through 21 experts who had readiness and met the qualifications specified, as well as were willing to participate in responding to the questionnaires for 3 times totally as a sample group of this research. This is in accordance with the criteria determined. As the research contribution of Macmillan Thomas T. (1971b) which revealed that if there were 17 experts up, the decreased rate of the errors would be much little. Collecting data by the Delphie Technique was carried out between August – December 2017.

The 1st questionnaire; it was a type of open-ended questionnaire consisting of the indicators tables for creative tourism in terms of economic, social-cultural, and environmental aspects. The researcher searched for information from the database of researches and academic contribution to be the choices for the experts, which included 3 aspects, 62 indicators totally, by opening the opportunity for the experts to consider and select as well as sharing their opinions freely. Moreover, the experts could offer new indicators which had never appeared in such choices. Then, the researcher collected the questionnaires to analyze the answers and removed the redundant information for creating the questionnaires next time. The researcher gave 2 weeks' time to the experts for completing the questionnaire, however, the real time used to complete the data collection was 1 month totally.

The 2nd questionnaire; it was a type of close-ended questionnaire by 5 scales, which included, Level 5 meant 'it should be used as an indicator the most', Level 4 meant 'it should be used much', Level 3 meant 'it should be used moderately', Level 2 meant 'it should be used a little', and Level 1, meant 'it should be used the least or it should be removed'. There were question items of 44 indicators to let the experts give the opinion scores whether each indicator was appropriate. The researcher delivered the questionnaire a 2nd time to the same experts in September 2017 to let them answer the questions again according to the issues which had been synthesized. For this time, the questionnaire was in a type of 5 levels of the rating scale to let the experts share opinions. After getting the answers back, the researcher analyzed and found the Median, Mode, and Interquartile Range, by using the analysis program of SPSS (Statistical Package for Social Science). The time used until getting the questionnaires back was 1 month.

The 3rd questionnaire; after getting the answers from the experts, the researcher brought all of the answers to do the questionnaires completely the same as the 2nd time but added the statistic value, which included, Median, Mode, and Interquartile Range calculated from the experts' responses of the 2nd time, together with indicating the answers of each expert in order to return them back to the experts for affirming such answers again in the 2nd week of October 2017. The researcher determined the time periods for responding the questionnaires back at within 2 weeks, but it appeared that in the 3rd time, the experts used the time to consider the questionnaires for too long. Hence, the researcher had to ask for such questionnaires until getting them completely in December 2017. When having considered all of the answers and they were concordant, then the researcher stopped asking and started to make a conclusion for the research (Skulmoski *et al.*, 2007).

Figure-1. Steps of Data Collection by the Delphi Technique



Source: Author

According to the sustainability analysis of creative tourism in Nakhon Si Thammarat province, the researcher took the indicators from the Delphi Technique to create questionnaires concordantly in order to collect the data for

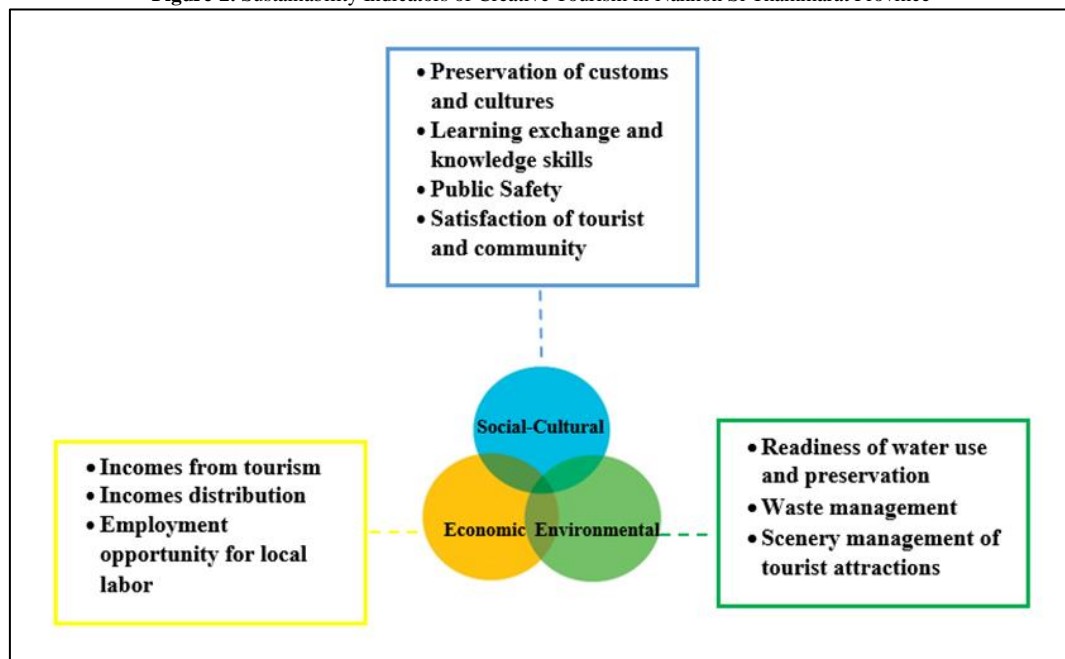
reliability test of the question set used for measuring the variables by using the Index of Item Objective Congruence (IOC) method. The researcher brought the questionnaires which had been investigated and revised by 5 experts to try out with 50 tourists, in order to analyze and find the reliability of the questionnaires, and got the Cronbach's Alpha equal to 0.982. It indicates that the questionnaires were appropriate for collecting the data.

The researcher collected the data of economic sustainability dimension by interviewing the stakeholders in the creative tourism activities and collecting the sustainability data in the social-cultural and environmental dimension by using Likert Scale (Croasmun and Ostrom, 2011; Hartley, 2014; Stoklasa *et al.*, 2017). The scores criteria for measuring with 7 frequency levels (Stipanović and Rudan, 2014) were as follows: 'the most' meant 7 scores, 'much' meant 6 scores, 'rather much' meant 5 scores, 'moderate' meant 4 scores, 'little' meant 3 scores, 'rather little' meant 2 scores, and 'the least' meant 1 score. The data collection in 3 dimensions was carried out between February – September 2018.

6. Results and Analysis

At the 1st time, the researcher brought the answers of 21 experts to categorize the indicators and got a total of 44 indicators. Then the researcher brought such indicators to do the questionnaires at the 2nd time. The researcher used 44 indicators to let the experts consider the significances, respectively. The 2nd answers appeared that the experts considered removing 16 indicators and 28 indicators were rested for doing the 3rd time of questionnaires. The researcher delivered the questionnaires which consisted of the previous question items together with the value scores back to the experts again and they were returned back. The researcher realized that the objectives to find out the sustainability indicators of creative tourism were concordant then stopped the research. The research results appeared as a Figure 2 below:

Figure-2. Sustainability Indicators of Creative Tourism in Nakhon Si Thammarat Province



Source: Author

Regarding such research results, the researcher brought the indicator issues which passed the criteria to create the research instruments on the sustainability of creative tourism in Nakhon Si Thammarat province. For the data analysis results of economic sustainability, the researcher chose to collect the data from the entrepreneurs in order to get the valid data in accordance with the indicators, by interviewing the tourism entrepreneurs, 50 samples from 6 business types, which included, accommodation, restaurant, product and souvenir shops, travel company, transportation, and entertainment places. Regarding the social-cultural sustainability and environmental sustainability, the researcher used the questionnaires through 7 levels of scores and processed the data with SPSS program. The sustainability was at a rather much level. The social-cultural dimensions had the Mean equal to 5.25, the environmental dimensions had the Mean equal to 4.59. According to the quantitative and qualitative research results, it can be concluded the analysis results of the sustainability on creative tourism and recommendations of development for tourism entrepreneurs, community leaders, and related organizations. The results were shown in Table 1 as follows:

Table-1. Analysis Results for Sustainability of Creative Tourism in Nakhon Si Thammarat Province

Sustainability Dimensions	\bar{x}	Meaning	Points which should be promoted/developed
Economic Sustainability			
Incomes from tourism	-	*	<ul style="list-style-type: none"> - Promote the admission fees from activities participation; - Sell the package of creative tourism in a form of experiences price because some tourists do not want to purchase the souvenir products or other community products; - Construct the reasonable compensations to the service providers.
Incomes distribution	-	*	<ul style="list-style-type: none"> - Promote the contribution of community products; - Select the materials in the community; - Establish tourism group and allocate the benefits fairly.
Employment opportunity for local labor	-	*	<ul style="list-style-type: none"> - Promote the employment in the locality; - Promote the development of labor skills in the locality to meet the needs of the labor market; - Administrate the appropriate wages.
Social-Cultural Sustainability			
Preservation of customs and cultures	5.58	Much	<ul style="list-style-type: none"> - Promote the participation in cultural activities of the locality such as traditions, etc; - Create the consciousness on preserving and valuing the cultures; - Create awareness in the community to perceive the values and significances of cultural heritage; - Manage the conflicts in the community; - Create good understanding to choose and accept new cultures and changes from outside which enter into the community.
Learning exchange and knowledge skills	5.35	Much	<ul style="list-style-type: none"> - Create good understanding between community and government sectors through the benefits of development; - Solve the problems to let the community open minds and accept new learning; - Adjust the forms of tourism activities which are able to attract the tourists to participate in the tourism activities; - Bring the tourists' recommendations to develop the tourism resources to be able to respond their needs.
Public Safety	4.95	Rather much	<ul style="list-style-type: none"> - Create the confidence to the tourists in terms of safety toward lives and property; - Consume hygiene food; - Facilitate the tourism travel and information of geography and climate.
Satisfaction of tourist and community	5.13	Rather much	<ul style="list-style-type: none"> - Promote the service training to the tourists; - Respect each other; - Create good images through tourism services; - Be the good hosts and good tourists.
Total	5.25	Rather much	
Environmental Sustainability			
Readiness of water use and preservation	4.64	Rather much	<ul style="list-style-type: none"> - The government sectors should allocate water sufficiently and manage the water supply thoroughly; - The tourist attractions should be promoted in terms of water preservation and water saving; - Give knowledge and control the wastewater left to

Sustainability Dimensions	\bar{x}	Meaning	Points which should be promoted/developed
			the public water resources.
Waste management	4.36	Moderate	<ul style="list-style-type: none"> - Every sector should mutually cooperate and manage the waste problem from the process of before the beginning of the tourism service to the process of after-services; - Promote the waste sorting for being convenient to the waste management further; - Reduce the slow-decaying waste and campaign the reduction of plastic use; - Prepare the waste bins thoroughly and sufficiently, including giving knowledge to leave all waste correctly.
Scenery management of tourist attractions	4.77	Rather much	<ul style="list-style-type: none"> - Develop basic public utilities not against the community livelihood; - Prepare for the readiness to support the elderly tourists and the invalid; - Reserve the traditional locality being through sceneries and histories.
Total	4.59	Rather much	

*Remarks: Dimension of economic sustainability through 3 indicators is a qualitative research collected the data by the depth-interview

7. Discussion

According to the consideration of sustainability indicators from the Delphi Technique to evaluate the sustainability of creative tourism, it was found that if considering the entrepreneurs' tourism businesses and some kinds of creative activities, they did not get the direct compensations from activities participation but the indirect compensations from the service use. Tourism development can motivate the development of tourism businesses in the locality and tourism creates opportunities for local investment for creating jobs to increase incomes and profits (Amalia and Doru, 2012). Regarding the local materials use from tourism activities in Nakhon Si Thammarat, the folks used their leisure time to do the supplementary job in the community. Each individual had the different costs of materials and time thus it made them have unequal incomes. Concerning the number of unemployment of the labor in 2018, there were 13,068 unemployed persons because the graduates had been increasing quickly which was not in accordance with the labor market (Nakhon Si Thammarat Administration Office, 2017). However, the tourism which has been developed appropriately will be able to create the new employment to the community, promote the employment in the locality, reduce the unemployment rate and labor migration (Amalia and Doru, 2012). Hence, the needs to use the tourism services can promote the locality development and increase the incomes of the households by employing the labor from the locality.

The outstanding points of creative tourism in Nakhon Si Thammarat province include the cultures, traditions and local livelihood considered unique characteristics. This cultural heritage is brought to be the tourism cost. Furthermore, learning and knowledge skills are regarded as crucial factors of creative tourism because local community will pass through this knowledge and local wisdom by having the community which is the owner of cultures to tell the stories and transfer the experiences. The tourists are motivated to know and participate in such cultures and would like to have a try by self-doing. The cultures owners will be the persons who propose all knowledge and skills through their own experiences and transfer to the tourists such as from demonstrating, practicing, having a conversation and sharing opinions, and leading to the improvement and development. In addition, the tourists will feel safe when they enter into the tourist attractions and get a friendly welcoming from the hosts, with the facilitation in tourism from the folks and good hosts. Although getting public safety, some tourist attractions in Nakhon Si Thammarat still has a limitation in terms of tourism seasons such as rain from the rainy season, natural disasters from flood, which will become the obstructions toward the tourism activities. From the performance of creative tourism activities in some areas, there were some parts of tourists and communities that feel unsatisfied with the change of community influenced by this tourism, the lack of correct perceptions for developing the tourist attractions from the government and private sectors, the listening to opinions from the stakeholders, including the budgets allocation which lacked of clear declaration until the perceptions were distorted through the community members. Besides, the stakeholders in the creative tourism activities still had the level of satisfaction through the tourism activities happened in the community differently. Sometimes, the cultural activities are about to motivate the economy in the community such as folklore performance (Amalia and Doru, 2012), and promoting the folks to participate in the tourism plan and management which help originate the sustainable development in the locality because the host communities take important roles for the tourism orientation in the future (Buaban, 2016).

Nakhon Si Thammarat still encounters the problems of wetlands for all year long, acid soils, and the lack of fresh water. The responsible organizations have been trying to improve and develop the issues to prevent from the effects toward people and tourism, and let the tourists be able to access clean water from general shops in the

community sources and restaurants. Some tourist attractions still lack drink dispensers. In addition, it was found that the communities in the areas of Nakhon Si Thammarat district usually encounter the problem of lacking water for consumption in the dry season, and there were some areas where there is lack of water supplies in the villages. The villagers used groundwater the quality of which was not good enough. Moreover, the amount of waste in Nakhon Si Thammarat province was around 1,763.17 tons per day, of which 1,255.84 tons per day was used beneficially, and 507.33 tons per day was eliminated (Nakhon Si Thammarat Administration Office, 2017). For all this waste, some is from parts of tourism activities and household. Therefore, it should be promoted to have the waste sorting before leaving in order to be easy for bringing to recycle and eliminate with correct procedures.

8. Conclusion

The sustainability dimension of creative tourism in Nakhon Si Thammarat province consists of 10 indicators, which include, the economic sustainability dimension; incomes from tourism, incomes distribution, and employment opportunity of local labor, social-cultural sustainability dimension; preservation of customs and cultures, learning exchange and knowledge skills, public safety, and satisfaction of tourists and community, environmental sustainability dimension; readiness of water use and preservation, waste management, scenery management of tourist attractions. When all 10 indicators were evaluated, the sustainability of creative tourism in Nakhon Si Thammarat province, it revealed that Nakhon Si Thammarat province had the potentials to manage the tourism sustainably in the future. The social-cultural sustainability dimension had the highest sustainability. This is considered by the tourists and stakeholders that the preservation of customs and cultures could create the sustainability toward the creative tourism of Nakhon Si Thammarat the most. In terms of the environmental sustainability dimension, it should focus on the waste management the most, and in terms of the economic dimension, it should promote the increase of incomes both direct and indirect ways to the tourism and community entrepreneurs, emphasize the local materials to use in the business, and create jobs to local people. Moreover, the stakeholders in these creative tourism activities should promote and develop the management of sustainable creative tourism in Nakhon Si Thammarat province by performing according to the recommendations in Table 1 in order to let the creative tourism of Nakhon Si Thammarat province be able to create a good quality of life for the community.

References

- Adler, M. and Ziglio, E. (1996). *Gazing into the oracle : the Delphi method and its application to social policy and public health / edited by Michael Adler and Erio Ziglio*. Jessica Kingsley Publishers: London.
- Amalia, V. T. and Doru, C. (2012). The effects of sustainable tourism management for local communities. *Analele universității constantin brâncuși din târgu jiu. Seria Economie*, 2(2): 155-60.
- Baker, D. M. A. (2013). Understanding the economic impact of tourism in the asian pacific region using the tourism satellite account tsa. *International Journal of Business & Social Science*, 4(3): 15-22.
- Bhuhakosa, K. (2011). Thailand research direction and research problems for.
- Buaban, M. (2016). *Community-based creative tourism management to enhance local sustainable development in Kanchanaburi Province*. University of Exeter.: Thailand.
- Carvalho, R., Ferreira, A. M. and Figueira, L. M. (2016). Cultural and Creative tourism in Portugal. *Turismo cultural y creativo en Portugal.*, 14(5): 1075.
- Chirilă, D., Chirilă, M. and Sîrbulescu, C. (2018). Study Regarding Manifestation Forms of Sustainable Tourism. *Scientific Papers: Animal Science & Biotechnologies / Lucrari Stiintifice: Zootehnie si Biotehnologii*, 51(1): 191-98.
- Croasmun, J. T. and Ostrom, L. (2011). Using likert-type scales in the social sciences. *MPAEA Journal of Adult Education*, 40(1): 19-22.
- Farrell, B. and Twining-Ward, L. (2005). Seven steps towards sustainability: Tourism in the context of new knowledge. *Journal of Sustainable Tourism*, 13: 109-22.
- Fernandes, C. (2011). Cultural planning and creative tourism in an emerging tourist destination. *International Journal of Management Cases*, 13(3): 629-36.
- Fotiadis, A. K., Vassiliadis, C. A. and Rekleitisc, P. D. (2013). Constraints and benefits of sustainable development: a case study based on the perceptions of small-hotel entrepreneurs in Greece. *Anatolia*, 24(2): 144-61.
- Glavonjić, T. J., Todorić, J., Doljak, D. and Golubović, N. (2017). Analysis of tourist motifd in the function of development of cultural tourism in the settkements surrounded by protected natural resources. *Journal of the Geographical Institute 'Jovan Cvijic*, 67(3): 333-40.
- Greenberger, A. and Levitz, M. (2013). The art of tourism. *Economic Development Journal*, 12(2): 24-28.
- Hai, L. T., Hai, P. H., Ha, P. T. T., Ha, N. M., Dai, L. T., Hoa, P. V. and Cam, L. V. (2014). A system of sustainability indicators for the province of thai binh, vietnam. *Social Indicators Research*, 116(3): 661-79.
- Hartley, J. (2014). Some thoughts on Likert-type scales. . *International Journal of Clinical Health & Psychology*, 14(1): 83-86.
- Helmer-Hirschberg, O. (1967). Analysis of the future: The delphi method. Available: <https://www.rand.org/pubs/papers/P3704.html>
- Hrubalová, L. and Palenčíková, Z., 2017. "Demand for creative tourism in slovakia." In *International Multidisciplinary Scientific Conference on Social Sciences & Arts SGEM*. pp. 205-12.
- Huang, C. H., Tsaor, J. R. and Yang, C. H. (2012). Does world heritage list really induce more tourists? Evidence from Macau. *Tourism Management*, 33(6): 1450-57.

- Izaryk, K. and Skarakis-Doyle, E. (2017). Using the delphi technique to explore complex concepts in speech-language pathology: An illustrative example from children's social communication. *American Journal of Speech-Language Pathology*, 26(4): 1225-35.
- Jordan, L.-A. (2012). Tourism, culture and the creative industries: Exploring the linkages. *Journal of Eastern Caribbean Studies*, 37(3/4): 1-5.
- Joshi, P. V. (2012b). A stakeholders networking for sustainable rural tourism development in konkan region of maharashtra state india. *Golden Research Thoughts*, 1(9): 1-7.
- Kezar, A. and Maxey, D. (2016). The Delphi technique: an untapped approach of participatory research. *International Journal of Social Research Methodology*, 19(2): 143-60.
- Macmillan, T. T. (1971a). The delphi technique. *Paper presented at the the annual meeting of the California Junior Colleges Associations Committee on Research and Development, Monterey, California*:
- Macmillan, T. T. (1971b). 'The Delphi Technique', *the annual meeting of the California Junior Colleges Associations Committee on Research and Development* (Monterey, California).
- Makkonen, M., Hujala, T. and Uusivuori, J. (2016). Policy experts' propensity to change their opinion along Delphi rounds. *Technological Forecasting and Social Change*, 109: 61-68.
- Maria, G. A. (2016). Classification of Various Forms of Tourism. *Annals of the University of Oradea, Economic Science Series*, 25(2): 313-19.
- Miller, G. (2001). The development of indicators for sustainable tourism, Results of a delphi survey of tourism researchers. *Tourism Management*, 22(4): 351-62.
- Nakhon Si Thammarat Administration Office (2017). General information of nakhon si thammarat province. Retrieved from Available: <http://www.nakhonsithammarat.go.th>
- Näyhä, A. (2012). Towards bioeconomy, A three-phase Delphi study on forest biorefinery diffusion in Scandinavia and North America. *University of Jyväskylä*:
- Noonsuk, W. (2013). *Tambralinga and Nakhon Si Thammarat : early Kingdoms on the Isthmus of Southeast Asia*. Nakhon Si Thammarat Rajabhat University: Nakhon Si Thammarat, Thailand.
- Ong Puay, L. (2017). Community involvement for sustainable world heritage sites: The melaka case. *Kajian Malaysia: Journal of Malaysian Studies*, (35): 59-76.
- Patuelli, R., Mussoni, M. and Candela, G. (2013). The effects of world heritage sites on domestic tourism: A spatial interaction model for italy. *Journal of Geographical Systems*, 15(3): 369-402.
- Perederenko, K., 2015. "Development of Creative Tourism in Latvia and the Best European Practices." In *XVI International Scientific Conference. Towards Smart, Sustainable & Inclusive Europe: Challenges for Future Development*. pp. 246-53.
- Poudel, S. (2014). Measuring the Sustainability of Protected Area-Based Tourism Systems: A Multimethod Approach. *United States, North America*:
- Puvaneswaran, K., Sarjit, S. G., Sridar, R., Ahmad, S., Tom, B. and Syamsul Herman Mohammad, A. (2017). Measuring Sustainable Indigenous Tourism Indicators: A Case of Mah Meri Ethnic Group in Carey Island, Malaysia. *Sustainability*, 9(7): 1256.
- RAND Corporation (2014). Delphi Method. Available: <https://www.rand.org/topics/delphi-method.html>
- Richards, G. and Raymond, C. (2000). *Creative tourism ATLAS News B2 - ATLAS News*. ATLAS: Tilburg.
- Richards, G. and Wilson, J. (2006). Developing creativity in tourist experiences. *A solution to the serial reproduction of culture? Tourism Management*, 27(6): 1209-23.
- Skinner, R., Nelson, R. R., Chin, W. W. and Land, L. (2015). The Delphi Method Research Strategy in Studies of Information Systems. *Communications of the Association for Information Systems*, 37: 31-63.
- Skulmoski, G. J., Hartman, F. T. and Krahn, J. (2007). The Delphi Method for Graduate Research. *Journal of Information Technology Education*, 6: 1-21.
- Stipanović, C. and Rudan, E. (2014). Development Concept and Strategy for Creative Tourism of the Kvrner Destination.
- Stoekli, N. (2007). *Using Surveys of Business Expenditure to Draw Inferences about the Size of Regional Multipliers*. Regional Studies: A Case-study of Tourism in Northern Australia. 41: 917-31.
- Stoklasa, J. A. N., Talasekk, T., Kubatova, J. and Seitlova, K. (2017). Likert Scales in Group Multiple-criteria Evaluation. *Journal of Multiple-Valued Logic & Soft Computing*, 29(5): 425-40.
- Strasser, A. (2017). Delphi Method Variants in Information Systems Research: Taxonomy Development and Application. *Electronic Journal of Business Research Methods*, 15(2): 120.
- Svetarundra, P., 2018. "Thailand Tourism Press Releases 2017."
- Svetasreni, S. (2012). Thailand: TAT's Creative Tourism campaign generates 24 million online visitors. *Asia News Monitor*: Available: <http://search.proquest.com/docview/1023230825?accountid=44447>
- TAT (2014). *Creative Tourism*. Tourism Authority of Thailand: Thailand.
- Thongsamak, J., Jitpakdee, R. and Aujirapongpan, S. (2013). Creative Tourism: Trends of Sustainable Tourism Development. *Journal of Thai Hospitality and Tourism*, 8(2): 91-104.
- Todorov, V. and Marinova, D. (2011). Modelling sustainability. *Mathematics and Computers in Simulation*, 81(7): 1397-408.
- Toppinen, A., Pätäri, S., Tuppurä, A. and Jantunen, A. (2017). The European pulp and paper industry in transition to a bio-economy. *A Delphi study*, 88: 1-14.

- UNESCO, 2008. "Experiential Learning is Key to UNESCO Creative Tourism Conference; Santa Fe International Conference on Creative Tourism." In *A Global Conversation*.brings theory to life during conference on developing creative resources.
- United Nations (2013). Thailand: Wat Phra Mahathat added to tentative UNESCO World Heritage Site list. *Thai Press Reports*: Available:
<http://search.ebscohost.com/login.aspx?direct=true&db=edsnbk&AN=147219E473E57620&lang=th&site=eds-live&authtype=ip.cookie.uid>
- Vellecco, I. and Mancino, A. (2010). Sustainability and tourism development in three Italian destinations: stakeholders' opinions and behaviours. *Service Industries Journal*, 30(13): 2201-23.
- Weaver, D. B. (2008). *Sustainable tourism : Theory and practice*: Elsevier butterworth-heinemann.
- Winita, P. and Thirachaya, M. (2013). Creative economy - based cultural tourism management strategic approach to sustainable tourism development of sakon nakhon province. *International Journal of Business and Management Studies*, 5(2): 2.
- Wisudthiluck, S., Saiphan, P., Teparakul, O. and Sindecharak, T. (2017). Creative tourism achievement in thailand: Evaluated by experts and tourists. *Research Administration Division, Thammasat University*.
- Yazdi, S. K. (2012). Sustainable tourism. American. *International Journal of Social Science*, 1(1): 51-56.
- Zadel, Z. and Bogdan, S. (2013). Economic impact of cultural tourism. *UTMS Journal of Economics*, 4(3): 355-66.