

THE ASSESSMENT OF THE IMPACTS OF TOURISM ON THE ECONOMY, ENVIRONMENT, SOCIETY AND CULTURE: CASE STUDY OF DOKKHAMTAI DISTRICT, PHAYAO PROVINCE, THAILAND

Warach Madhyamapurush, School of Business and Communication Arts,
University of Phayao

Pannanat Saksirikhun, King Mongkut's University of Technology North
Bangkok (Prachinburi Campus)

Janjira Muenrew, Queen Sirikit Botanic Garden (QSBG), The Botanical
Garden Organization

Niramol Promnil, University of Phayao

Numtip Smerchuar, School of Political Science and Social Science, University of
Phayao

Mohntohn Srisuk, Uttaradit Rajabhat University

Krisada Tussama, Uttaradit Rajabhat University

ABSTRACT

This research aims to assess the impacts of tourism on the economy, environment, social, and cultural aspects of Dokkhamtai District, Phayao Province, Thailand. Data were collected from 400 samples of people living in the Dokkhamtai District area using an Assessment Form on the impacts of tourism on the economy, environment, society, and culture. Data were analyzed using descriptive statistics: frequency, percentage, and Standard Deviation (S.D.).

The results revealed that, across all aspects, the economy, environment, social, and cultural impacts of tourism were at a high level ($\bar{X}=3.92$); the highest appeared in the impact of tourism on social and culture aspects ($\bar{X}=4.00$), economic aspects ($\bar{X}=3.98$), and environmental aspects ($\bar{X}=3.79$), respectively. The impact of tourism on the economy, society, and culture in Dokkhamtai District, Phayao Province were affected by higher cost of living. Price controls should be considered within the organizational establishment to regulate the systematic tourism infrastructure. For society and culture, this impact affected people's relationships in negative ways due to competition in the commercial field. The community should preserve local culture and traditional practices. Moreover, the decreasing safety of tourists should also be a concern. Tourism in this community created detrimental effects on the environment.

Suggestions to avoid unnecessary impacts consist of conducting meetings with the community, creating prevention plans for tourists' safety, studying carrying capacity, and regulating appropriate rules in delivering community's activities. These guidelines will bring the learning process to the community and create awareness to employ natural resources effectively.

Keywords: Community Tourism, Tourism Impact, Economic Impact, Social and Cultural Impact, Environmental Impact, Phayao Tourism

INTRODUCTION

The tourism industry plays an important role in economic development in making the investment in the tourism business and creating jobs for people. Thailand has recognized the importance of tourism as an important mechanism for maintaining Thailand's economic stability (Likhitsaran, 2019). The tourism industry requires human service, especially in direct businesses such as travel agencies, hotels and accommodation, restaurants, souvenir shops, and transportation.

Phayao Province is located in the northern part of Thailand and has a variety of tourist attractions. For example, it is a cultural tourism, Buddhism tourism, and natural tourism destination. Dokkhamtai District is one of the closest areas to the inner city of Phayao - only 11 kilometers away - and is a lowland area that is suitable for agriculture. When considering the tourism composition in Dokkhamtai, it is interesting to note that in terms of: 1) Attractions - this area has various attractions, including natural resources, archeology, history, and local traditions; 2) Activities - there are a variety of tourism activities that are related to the local traditions and natural resources; 3) Accommodations - there are plenty of hotels, homestays, resorts, guesthouses with peaceful and private atmospheres; 4) Amenities - basic tourism amenities are of moderate quality; and 5) Accessibility - there are many ways to access the area due to routes that cross over to other districts in Phayao province and other provinces.

Although tourism will help generate income in the community, tourism also creates a negative impact on society and the environment. For example, the increasing amount of waste and pollution problems, in addition to the lack of serious cooperation from agencies or groups of people in the community. Therefore, it is imperative that local people get involved in community development and community support to manage the tourism resources, which are comprised of: 1) The environment - learning and collaborating to preserve the environment; 2) Society and culture - tourism management that promotes cultural traditions and local life to create awareness for tourists of cultural values at tourism attraction; and 3) Local economy - fair distribution of local income to the tourism attractions' owners (Thongma, 2016), as well as the management of tourism resources for maximum benefits. The Environmental and Social Impact Assessment (ESIA) employs as a process to forecast the cultural and socio-economic impacts of a project or project activity.

At present, the impact of tourism to the environment, socio-cultural heritage, and economy has been studied, though it has been limited only to the impact on quality of life. A literature review suggests that there has been no research done on the impact of tourism on people's lives in Dokkhamtai District, Phayao Province. Therefore, an assessment of economic, environmental, social, and cultural impacts in Dok Khamtai District, Phayao Province is important and beneficial in planning and formulating a tourism policy effectively.

OBJECTIVES OF RESEARCH

1. To assess the impacts of tourism on the economic, environmental, and socio-cultural settings in Dokkhamtai District, Phayao Province.
2. To explore the approach to management of the impacts of tourism on the economic, environmental, socio-cultural settings in Dokkhamtai District, Phayao Province.

RESEARCH METHODOLOGY

Population and sampling

The population in this study was 71,403 people living in Dokkhatai District. The sample size was 396 people, although the researchers had designed the research to collect data on 400

participants. Samples were calculated at a confidence level of 95%, with a margin of error of 5% (Yamane, 1973).

Research Instrument

The research relied mainly on a questionnaire, which consisted of three sections: the general data of respondents, their opinions on the impacts of tourism on the economy, environment, and socio-cultural heritage, and any additional comments. A Likert-scale response with five levels was adapted to assess the impacts of tourism impacts the economy, environment, socio-cultural heritage in Dokkhamtai District, Phayao Province. Likert-scale questions were interpreted on five levels: very important impact ($\bar{X}=4.21-5.00$), important impact ($\bar{X}=3.41-4.20$), moderate important impact ($\bar{X}=2.61-3.40$), less important impact ($\bar{X}=1.81-2.60$), and no important impact ($\bar{X}=1.00-1.80$).

A research instrument assessed content validity of the questionnaire using the Index of Item-Objective Consistency (IOC) >0.05 . Data were analyzed using descriptive statistics, which include percentage, mean, and standard deviation.

RESEARCH RESULTS

Analysis on Opinion of the Impacts of Tourism on Economic, Environmental, and Social-Cultural Elements in Dokkhamtai District, Phayao Province

Respondents were female 58.25% and male 41.75%. The largest number of respondents were 31-40 years old, followed by those 51 years up, 41-50 years, and 20-30 years, respectively. The education level of the respondents was primarily a bachelor's degree, with a higher level than a bachelor's degree, primary education, secondary education, and lower than primary education levels following in number. The monthly income, in order by number of respondents, was 10,000 THB (321.13USD), 10,001-15,000 THB (321.16-481.69 USD), 25,001 THB (802.85 USD), and 20,001-25,000 THB (642.28-802.81 USD). Most of the respondents were indirectly involved in the tourism business.

The greatest number of respondents had family three members, followed by four members, and then seven members. Of those respondents with family members living outside the Dokkhamtai area, most had only one member, followed by two members, and then seven members, with the majority living outside Dokkhamtai due to their occupation, living with a new family due to marriage, and to study, respectively. The greatest number of those living outside Dokkhamtai did so for 31-40 years, followed by 1-10 years, with the fewest living away from Dokkhamtai for 61-70 years. The happiness score, as reflected by residents (on a 10-point scale) had the largest number at 8 points, followed by 7 points, and the fewest at 3 points.

Assessment on the Impacts of Tourism to the Quality Of Life of Villagers in Dokkhamtai District, Phayao Province

The impacts of tourism on the economy, the environment, and the socio-cultural elements of Dokkhamtai District, Phayao Province, showed, across all impacts, ($\bar{X}=3.92$). Individually, tourism impacts on socio-cultural elements were considered to be the most important impact, at ($\bar{X}=4.00$), followed by the economic impact, at ($\bar{X}=3.98$), and finally the environmental impact, at ($\bar{X}=3.79$), (Table 1).

The impacts of tourism on the economy, environment, and society-culture	\bar{X}	S.D.	Level of importance
Tourism impacts on environment	3.79	0.96	important impact
Tourism impacts on society and culture	4.00	0.95	important impact
Tourism impacts on economy	3.98	0.97	important impact
Total	3.92	0.96	important impact

The tourism impacts on the environmental quality of life of the people in Dokkhamtai District, Phayao Province were considered significant. Ranking the highest overall within this category were learning and creating awareness in employing resources effectively ($\bar{X}=4.21$). Second was the community paying attention to environmental preservation ($\bar{X}=3.99$) and young villagers understanding environmental preservation by learning from community tourism ($\bar{X}=3.92$). However, the lowest impact on community tourism was the destruction of the environment ($\bar{X}=3.35$), as appears in Table 2.

Tourism impacts on the environment	\bar{X}	S.D.	Level of importance
Tourism causing garbage problems	3.57	0.93	important impact
Community tourism improves infrastructure and facilities	3.91	1.06	important impact
Community tourism destroys the environment	3.35	0.96	moderately important
Community paying attention to environment preservation issues	3.99	0.92	moderately important
Pollution problems from tourists' vehicles	3.57	0.99	important impact
Learning and creating awareness in employing resources effectively	4.21	0.83	important impact
Young villagers understanding environmental preservation by learning from community tourism	3.92	1.03	important impact
Total	3.79	0.96	important impact

The tourism impacts on society and culture as they affect the quality of life of villagers in Dokkhamtai District, Phayao Province, in total were statistically significant. The first three highest in mean appeared in young villagers with an awareness of the need to preserve their homeland while providing more public activities ($\bar{X}=4.26$). This was followed by creating opportunities for the elderly or handicapped to improve their quality of life ($\bar{X}=4.24$). Next were villagers who respect the rules, regulations, and mutual agreements ($\bar{X}=4.23$), and the least important impact was community tourism affecting decreasing problems in the community ($\bar{X}=3.49$). The results are shown in Table 3.

The impacts of tourism on society and culture	\bar{X}	S.D.	Level of importance
Decreasing safety in life and property of tourists and villagers	3.61	1.02	important impact
Infrastructure/facilities have been developed	3.80	1.07	important impact
Villagers' quality of life improvement	4.11	0.98	important impact
Knowledge sharing between tourists and villagers	4.23	0.95	very important impact
Villagers' relationships increasingly negative	3.50	0.99	important impact
Tourism created community strength with people involved in tourism management	4.10	0.91	important impact
Villagers respect rules, regulations, and mutual arrangements	4.23	0.89	very important impact
Villagers increasingly passionate about community resources preservation	4.20	0.82	important impact
Creating opportunities for elderly or handicapped groups to improve their quality of life	4.24	0.82	very important impact
Young villagers have an approach on self-development	4.14	0.92	important impact
Young villagers have awareness on homeland preservation and providing more public activities	4.26	0.94	very important impact
Tourism can create jobs for young villagers to spend their time effectively	4.07	0.96	important impact
Community tourism affects leading to decreasing problems in the community	3.49	1.02	important impact
Total	4.00	0.95	important impact

The tourism impacts on economic quality of life of villagers in Dokkhamtai District, Phayao Province, in total were considered to be important. The first three impacts with the highest mean were community products having greater value ($\bar{X}=4.18$), followed by regular income distribution to all groups of youth and elderly to lessen the number of people migrating to work outside the community ($\bar{X}=4.17$), and an increase in hiring jobs in the community ($\bar{X}=4.07$), respectively, as appears in Table 4.

The tourism impacts on environment	\bar{X}	S.D.	Level of importance
Villagers gain additional income from tourism	3.99	0.96	important impact
Villagers gain additional income from community tourism	3.87	1.03	important impact
Increase in hiring in community	4.07	1.04	important impact
Regular income distribution to all groups of youth and elderly	4.17	0.95	important impact
Community products have greater value	4.18	0.97	important impact
Villagers affected by higher cost of living	3.74	0.84	important impact
Villagers changed behavior to excess spending	3.67	0.97	important impact
Decrease the number of people migrating to work outside the community	4.17	0.99	important impact
Total	3.79	0.96	important impact

Approach in Managing the Tourism Impacts on the Economy, Society and Culture, and the Environment in Dokkhamtai District, Phayao Province

Economic Aspect

The first impact appeared in spending behavior, which increased to excess spending. Solutions for this problem could be: 1) A training program on household income management, 2) Supporting occupations that can create income from tourism, and 3) Encouraging villagers to earn additional income during the rice planting season.

The second impact was affected by a higher cost of living. In this case, solutions could be: 1) Planning to control local product prices, 2) Organizations establishing a regulated and systematic tourism structure (for example, community tour arrangement, improving tourist attractions, community shops focusing on local products, and improving the quality of items for sale at tourist attractions to create greater value, and 3) Regulating tourism groups in the community as co-operative units to distribute income fairly among the villagers to provide them with additional income from the tourism business.

Social and Cultural Aspect

Firstly, relationships among residents changed to negatively, with people becoming greedier and selfish. The solution to the problem is to preserve the local values and traditions.

Secondly, there was a decrease in the personal safety and property of tourists. The solutions to this problem are: 1) Arrange a meeting to foster understanding and cooperation with local people, 2) Create a monitoring plan with related organizations for improving tourist safety, and 3) Publicize all tourist attraction information in the Dokkhamtai area while also providing clearly marked route signs to ensure safe travel.

Environmental Aspect

The first issue is community-based tourism can cause the deterioration of the environment. Solutions to the problem are: 1) There needs to be a study on the carrying capacity of the number of tourists the area can handle to define an appropriate tourism pattern in the future, 2) The community should determine rules for conducting activities within the community to better understand and create awareness of using natural resources effectively, 3) Support for the budget in the development and conservation of tourist attractions by arranging budget allocation in various projects of relevant government agencies should be undertaken, and 4) Promotion measures, such as public relations and dissemination of environmental conservation at tourist attractions through radio programs, newspapers and magazines, etc. should be encouraged.

The second issue is that tourism can cause a waste disposal problem. Solutions to this situation include: 1) Tackling the problem of waste management, 2) Promote the separation of garbage, and 3) Support the use of waste to generate income for households and tackling the problem of pollution from tourists' vehicles. Additional suggestions for overall environmental issues are: 1) Setting environmental quality standards by limiting the quantity or the concentrate of pollution that harms humans, plants, and animals, and 2) Environmental monitoring and quality control in terms of quantity and quality of life in each area and improving the quality of the environment.

RESEARCH DISCUSSION

Community-based Tourism (CBT) refers to tourism that the community has undertaken itself in planning, operating, and monitoring activities to create sustainable tourism and environmental preservation, including fair distribution within the community in achieving the goals set by the sufficiency economy (Indices Emphan, 2007). Community-based Tourism's core principles are as follows: 1) Tourism must not cause negative impacts on communities and tourism resources, in both tourist attractions and nearby areas, 2) Tourism must be sustainable in both natural resources and the wise utilization of resources at tourist attractions, 3) Local people must actively participate, from designing, working together, evaluating, and following up, 4) Tourism brings income or other benefits to the community and generates fair income distribution, and 5) Tourism provides a better experience for tourists. It also raises awareness of good tourism and helps tourists learn and understand the local community and tourist attractions that are managed by the local community.

When assessing the impacts of tourism on economic, environmental, societal, and cultural aspects, it can be seen that the effects of tourism on the quality of life of people in Dok Khamtai district community, Phayao province were found to be highly important, as follows:

The tourism impact on the environment promotes learning and creates awareness in utilizing local resources to make local people pay more attention to environmental conservation. Local youths also understand environmental concepts through the arrangement on community-based tourism because the environment is a core factor of the tourism industry that attract tourists for economic benefits. The tourism environment can be categorized into two types: 1) Natural Environment and 2) Man-made Environment, such as archaeological sites, construction, buildings, residences, etc. However, the growth of the tourism industry affects the environment. Two ways of looking at the impacts are as follows: 1) Harmony occurs when tourism and the environment are supportive, creating mutual benefits for the economy, society, culture, and the environment. 2) Conflict occurs when tourism damages the environment. This can be caused by many reasons, such as too many tourists, a lack of planning and education, etc.

This study found that the impact of tourism on the environment has both positive and negative sides, as follows:

The first positive impact is that people in the community get involved with learning activities and creating awareness on effectively using local resources. As a result, the local people pay more attention to their environment, while local youths understand environmental preservation through community-based tourism that links the improvement of basic tourism facilities and infrastructure. This finding therefore confirmed the previous results in the Nonglom area that concluded the positive impacts of tourism led to increasing levels of local knowledge about public utilities and activities related to organizations regarding tourist safety. The negative impacts were that community-based tourism degrades the environment. However, the community created a waste management program by establishing company with the participation of local people in the Nonglom area. This program allowed local people to learn about waste separation, become aware of the importance of local waste management leading to lower levels of waste production, and the creation of more natural fertilizer from food waste. Additionally, there was a reduction in the amount of pollution from hazardous garbage (Jinhirun & Kamnuansilapa, 2013).

Tourism impacts on society and culture can be concluded as: Positive impacts included the majority of local people recognizing the benefits of tourism, especially when encouraging local youths to understand the importance of preserving their homeland and engaging in more public activities. This is consistent with what Suparatpreecha (2010) found, that community-based tourism created positive impacts by encouraging local people to be prouder of their own culture and has

continued to restore traditions and ancient culture. It also provides opportunities to elderly residents and capable groups to participate and improve their quality of life. Creating jobs for local youths and helping them spend their time effectively is another positive outcome. Negative impacts include the diminishing relationships of the people in the area towards more commercial and selfish outcomes. Because tourism may provide an unfair distribution of income, those who directly benefit may be limited to specific groups or people from outside the community. The tourism benefits should belong to the owners of tourist attractions, yet sometimes benefit distribution is unfairly managed. Tourism may also increase the cost of living in a community.

Economically, the impacts of tourism do have some positive outcomes. Increasing community production can lead to fairer income distribution to local youths, the elderly, and local people, and prevent large numbers of local residents from migrating away from the area to look work outside the community. Increased hiring for tourism business jobs allow people to stay at home with their families and within the community, rather than being forced to look for work elsewhere. This result is in accordance with Suwan (1995), who stated that tourism creates jobs and income for individuals and gives people in the community the opportunity to engage in new occupations, such as taxi drivers, selling souvenirs, etc. This is in line with the research by Bunsuri & Wongthanavas (2013), which found that tourism generates income for local people, resulting in economic circulation and a distribution of income to more people in the community. The Tourism Authority of Thailand (2001) also highlighted the positive impact tourism has on income distribution in creating jobs for the community and creating entrepreneurs, community products, marketing improvement, and sustaining production of local products. When people have a higher income per capita, local people can spend more and contribute to the economic circulation of the local community and stimulate other areas of production, bringing the community's resources to use for greater benefits. Negative impacts, however, resulted in local people being affected by a rising cost of living, as well as villagers changing their spending behaviors to buy beyond their means. When travel trends come to a community, tourism services and products are needed. Some entrepreneurs take advantage of this to increase the price of products and services at the tourist attractions and within the community, which leads to an increasing the cost of living. Suggestions to these problems are: 1) Price control planning, 2) Establishing an organization to set up a systematic tourism structure, including setting up tours of villages and maintaining tourist attractions, establishing shops in the community that sell local products that have been selected and modified to add value and enhance the products for sale at tourist attractions, and 3) Launch groups in the form of co-operative units to share benefits in fair manner. By establishing a formal organization, income can be distributed to people in the community from local products sold at tourist sites. In this way, local people also gain income from the tourism industry.

RESEARCH RECOMMENDATIONS

1. Communities and governments should jointly develop adequate plans for waste management to solve environmental problems in the community.
2. The community should cooperate with various agencies to publicize tourist attraction information to encourage tourists to travel to the area. Attention should be paid to the preparation of clear road signs for the convenience of tourists.
3. The community should focus on bringing wisdom to reflect the identity of the community through souvenir products created for added value, increased income, and educational enhancement.

Suggestions for the Future Research

1. There should be a study done on the carrying capacity of the area in order to determine an appropriate tourism model in the future.
2. There should be a study done on the factors affecting participation in community development in order to increase knowledge and participation within the community.

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