

Demand and Supply Management for Mae Wang Natural Tourism Site, Chiang Mai, Thailand

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Abstract

This study was conducted with the objective to study guidelines on Demand and Supply Management in Mae Wang Natural Tourism Site, Chiang Mai, Thailand. The questionnaire was used to collect data from 400 Thai visitors who came to the study area as single-purpose visitors and In-depth interviews were then conducted with 13 key informants being relevant to tourism in the area on the issue of community attitudes towards tourism and their management tourism requirement. The study found that the demand management should include 4 approaches are; 1) Tourism management approaches focused on preserving the richness of tourism resources to retain the original visitor groups 2) The approaches to enhancing recreational activities related to natural exposure and activities for the elderly visitors 3) The approaches to increase the publicity of tourism sites, the abundance of natural resources, various recreational activities, easy access to tourism sites with low cost and 4) The approaches to increase the attractiveness of local special activities. The supply management should include 8 approaches are; 1) The approaches to promote community participation in tourism planning and control schemes take advantage of resources 2) The approaches to management and accessibility of the tourism sites 3) The approaches to amenities management for visitors should be well-managed 4) Service shops organizing for enhancing service standards 5) The approaches to management for the security of tourism site 6) The approaches to developed next generation of community leaders to be able to move the community tourism forward in the future 7) Integrate and developed several forms of tourism that are the identity of the community and 8) The approaches to developed new tourism routes.

Keywords—Tourism demand, Tourism supply, Tourism management, MaeWang Natural Tourism Site

1. Introduction

Thailand places importance on tourism development as a tool for driving the country's economy because tourism is a service industry related to economic activity that can create jobs for many people and it helps to develop the economy at the community level. One important factor that will make tourism successful is the tourism resource. Tourism generally expects visitors to be satisfied with the quality of the tourism site. Therefore, the community should be able to manage the tourism site to meet the needs of the visitors to impress them. For a natural tourism site, the Tourism Authority of Thailand means a place that is open for tourism and has attractive natural resources for visitors. These natural resources are a natural beauty and are a local identity (Official Statistic Thailand, 2017). Therefore the tourism management must focus on preserving abundance and its natural uniqueness because if the natural attraction is destroyed, it takes a long time to recover or some natural resources may not be able to be fully restored. The natural attractions management

approach to creating economic value for the community should focus on preserving the natural attractions by considering the consistency in the demand and supply side.

Chiang Mai province is Thailand's major tourist destination. There are many visitors who come to Chiang Mai in each year. The highlight of Chiang Mai is natural attractions, cultural identity, and its facilities are well-equipped. One of its famous and popular natural tourism sites is Mae Wang District or Mae Wang River Basin, where 81% of its tourism sites are located within the area of Mae Win Sub-district (Chuchart, 2001a). The tourism sites in Mae Wang are located not far from the city so it makes the visitors' access to tourist destinations easy with low travel expenses. Attractive factors of these tourism sites occur naturally in this high mountainous area, which has some portion being inside Mae Wang National Park. Among all villages here, as high as 78.94% of them are hill tribe villages (Mae Win Sub-district Administration Organization, 2014). Moreover, there are many recreational activities in Mae Wang tourism sites such as elephant trekking, Bamboo rafting, hiking, mountain lifestyle, etc. Nowadays tourism can create jobs and it makes the number one income for community (Srijan, 2014)

However, even local government agencies and community leaders in Mae Wang community will focus on and promote community tourism, but in tourism management, there are many problems such as the orderliness of the restaurant, tourism operations, waste management and visitor information centers, etc. In addition, visitors' recreation activities began to affect the quality of natural resources. Moreover, the implementation of the policy of the tourism development strategy of the Sub-District Administration Organization also needs to promote and involve many outside parties. These factors are the problems and constraints of the tourism sites for management of the tourism resources to be ready to serve visitors to meet the needs and a good attitude towards tourism.

By recognizing the importance of maximizing the use of tourism resources in the Mae Wang community to create economic value and the limits of tourism management, the researcher had the idea to study the demand side and supply side of tourism such as behavior, attitude and needs of visitors together with the opinions of those involved in the area to find a suitable guidelines to manage natural tourism sites in Mae Wang community and it is beneficial to preserve tourism resources so that sustainable economic value can be created for the community.

2. Research Objective

To study guidelines for Demand and Supply Management in Mae Wang Natural Tourism Site, Chiang Mai, Thailand.

3. Literature review

An economic theory explains behavior in making a buying decision of consumers that a consumer would seek for maximum satisfaction or utility under the limitations of income and market price (Chutiwong, 2011). Regarding behaviors of visitors, decisions in choosing tourism sites involve with several reasons and various options. Therefore, attempts for tourism management should pay attention to understanding behaviors and reasons that affect decisions of visitors in order to find solutions to impress visitors and encourage them to revisit. Chuchart (2001a) stated about the importance of the hospitality factor. Impression and revisiting of visitors are highly influenced by the reception with the hospitality of the local people or the staff rather than by natural beauty of

the tourism site. According to Chatkun (2012), tourism resources are destinations of the tourism system. They are products and services that are important for decisions of consumers. If the consumers view the product or the services as being beneficial, the process of repeated buying can occur. The purchasing process consists of 5 steps are. 1) Stimulate the demand 2) Searching for information 3) Evaluation of alternatives 4) Purchase decision and 5) Post-purchase feeling, there can be two kinds of feeling happening after purchasing: satisfied and unsatisfied. Satisfaction in tourism products, which depend on the quality of services, must have. If visitors are not satisfied with the services, the persons in charge must try to improve the quality before there is a negative effect on purchase decision of the unsatisfied visitor and before the dissatisfaction is transferred to other visitors.

Jittangwattana (2005) explained about behaviors of visitors that their experience, which occurred from their assessment on the trip in terms of site, environment, people, services, amenities, etc, may lead to two different results. 1) Being satisfied. This means the trip is a positive experience that let the visitor had a good feeling with the site, people, environment, or amenities. 2) Being unsatisfied. This means the trip resulted in a negative experience that the visitor feels with the site, people, environment, or amenities. Chuchart (2001a) and Jittangwattana (2005) stated that a tourism site must have 3 components, which are also called as 3 A's. The first A is Tourism site, the most important factor of tourism sites. A tourism site must have attractive things, which may involve with its sites, events, or characteristics. Each visitor may have different levels of interest in different attractive things. The next factor is Amenities. A tourism site must have amenities or facilities to provide services to visitors so that they gain happiness, comfort, and impression. The last A is Accessibility to the tourism site. It is important that a tourism site must support travel systems that allow visitors to access it and can continue to nearby tourism sites.

To find guidelines to manage natural tourism sites in Mae Wang community Chiang Mai, the study focuses on both the demand side and the supply side.

4. Research Methodology

(1) The population and sample specification in demand side.

The population in this study was all Thai visitors that comprised approximately 108,000 persons per year (Mae Win Sub-district Administration Organization, 2014) and these visitors were single purpose visitors that came directly to utilize recreational benefits in tourism sites of Mae Wang community, Chiang Mai Province. This study made a sampling procedure with according to the study population by using the random sampling table of Yamane at the confidence level of 95 and found that the sample of this study should consist of 400 visitors then the data of the sample were collected by using a questionnaire with an accidental Sampling method.

(2) Research Tools

In this study, the data collected on the demand side was conducted by using a structured questionnaire for collecting data from the sample. The questionnaire was tested for validity with the Index of Concurrence (IOC) valid from 0.50 and above (Petchrot and Chamniprasert, 2002) and was also tested for Reliability by finding Coefficient Alpha by Conbrach' s method with the test result of α is 0.968. The questionnaire was divided into 5 parts which are 1) seven questions about the general in the formation of the visitors; 2) ten questions about the traveling behavior and

participation in recreational activities of visitors. 3) six questions about cost of traveling 4) six questions about visitor attitudes and their satisfaction toward tourism sites; and 5) three open-ended questions about visitors requirements and suggestions For the data on the supply side were collected from in-depth interviews, which were conducted with 13 stakeholders who were key informants about tourism of the community. The interviews were guided by a semi-structured interview form, which was designed to obtain data concerning management of tourism sites, policies, problems, and obstacles in working. The 13 key informants consisted of three representatives from the governmental organizations, two representatives of organizations related to community tourism, two representatives of tourism business entrepreneurs, two representatives of community leaders, two representatives of villagers who did not do a tourism business and two scholars who had experience in tourism.

(3) Data Analysis

The researchers used descriptive statistics for demand-side analysis and content analysis based on qualitative data analysis process. This content analysis has 3 main components; 1) the recorded data were organized by being transcribed and edited to have a format that is convenient for the analysis; 2) the data were presented in a descriptive form, which was resulted from linking the organized data together according to the conceptual framework used in the analysis; and 3) the findings from the data presentation and the in-depth interviews were interpreted and concluded to obtain a tourism management guidelines from a supply perspective. The conceptual framework as shown in figure 1.

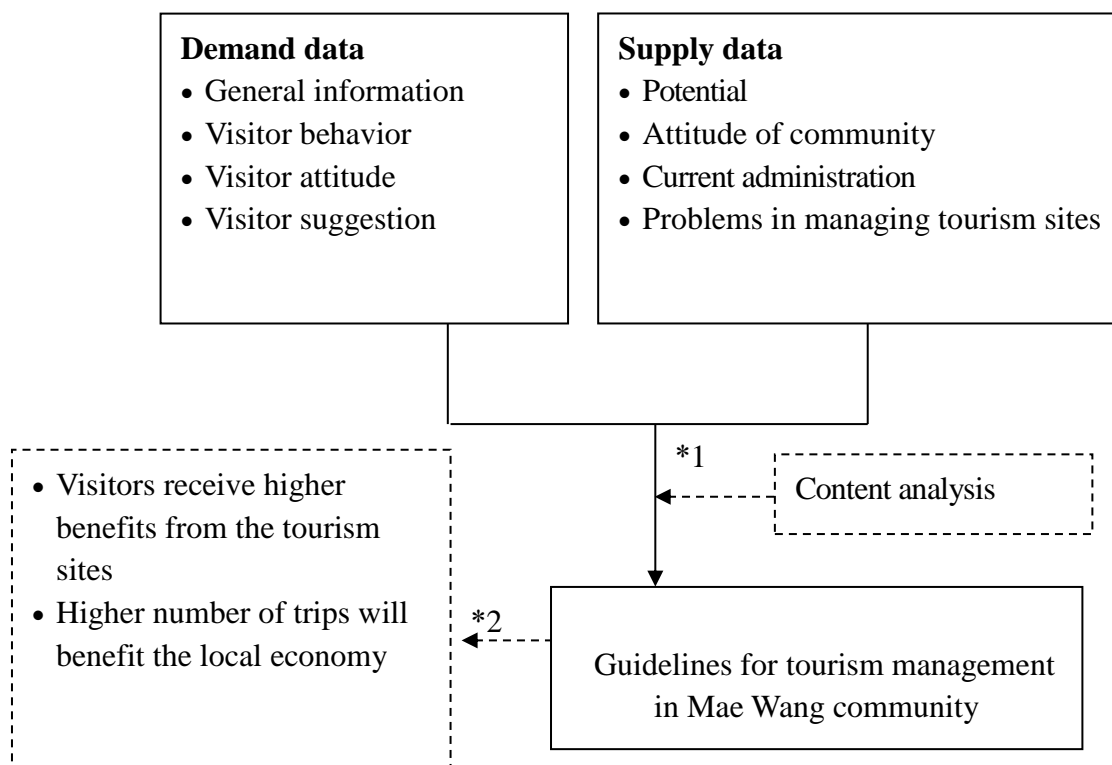


Figure 1 The conceptual framework

Remark Dashed line *1 refers to techniques used in this study

Dashed line *2 refers to benefits expected to receive

5. Results and Discussion

(1) Visitors information

According to the survey results about socioeconomic characteristics of visitors who visited tourism sites in Mae Wang Community, it is found that the proportion of male and female, single and married is similar. Most visitors graduated with bachelor's degree. The average age is 30 years, 3 months, only 11.75 percent are over the age of 40 years. About 66.45% do not work regularly, such as trading, private businesses, farmers, housewives, etc. About 84.25% have low monthly income and most are visitors with a residential address in Chiang Mai.

(2) Travel behavior and recreational activities of visitors.

According to the survey on behaviors of the visitors and their recreational activities in tourism sites in Mae Wang Community, it found that most visitors were found to travel tourism sites in Mae Wang mainly for relaxation. Mostly grouped with friends or family. Since the tourism sites in Mae Wang Community are located not far from the city of Chiang Mai., low travel expenses and take a short trip back and forth, so the tourism sites in Mae Wang community have many recreational activities to serve both one-day-trip visitors and overnight visitors. However, In each trip, visitors spend more than 73.50 percent of their time on tourism sites, more than four hours a day. For the tourist spots in the Mae Wang tourism sites, the most popular are Mae Wang River visitor spot because it is an easy access point. And there are many recreational activities including bamboo rafting, elephant ride, coupled with a restaurant and cool weather, that make visitors stay throughout the day. Most popular recreation activities of the visitors are swimming and bamboo rafting. Most visitors who come to Mae Wang were the visitors who favorite traveling to natural tourism sites, who have a frequency in traveling to natural tourism sites at 8.72 per year on average and these visitors had returned to visit Mae Wang tourism sites again with the average of 4.08 times per year. The visitors have the opinion that most attractiveness of the tourism sites that make the visitors favorite and decided to visit Mae Wang tourism sites are naturally, good weather and variety of recreational activities, so 92.50 % of visitors want to come back again in the future

(3) Traveling cost

Most visitors travel by private car, motorcycle or bicycle respectively. Visitors have an average cost of traveling to tourism sites at 582.91 baht per person per time, with 66.79% of food and beverage, 16.77% on entertainment 8.48% of souvenirs, 4.72 % for accommodation and 3.25 % for other expenses.

(4) Information attitude and the visitor satisfaction with the visitor attraction

The survey results regarding satisfaction of the visitors toward various environmental aspects of tourism sites in Mae Wang Community, Chiang Mai Province, are presented in detail in Table 1

Table 1. Performance satisfaction of the visitors

Components of tourism sites	Satisfaction level		
	\bar{x}	<i>S.D.</i>	level
Attractiveness of the tourism sites	3.57	0.72	High
Accessibility to tourism sites	3.09	0.64	Moderate
Amenities	2.81	0.58	Moderate
Security	3.20	0.63	Moderate
Other	2.97	0.52	Moderate
Overall average satisfaction level	3.08	0.56	Moderate

From Table 1, it was found that the visitors had a high satisfaction level regarding the site's attractiveness and moderate satisfaction level regarding the accessibility to tourism sites, amenities, security and other aspects, while they had a moderate level of overall satisfaction.

(5) Opinions of visitors and their recommendations

Based on the open-ended questions that allow the visitors to suggest improvements in various aspects of the tourism sites, it was found as follows.

Requirements regarding tourism site improvements

The visitors provided some recommendations that suggest improvements in these aspects.

- ① Amenities, such as directional signs, parking lots, etc, for 44.75%
- ② Cleanness improvement by adding garbage bin, for 39.75%
- ③ Cleanness of food and drinks, for 13.75%
- ④ Transportation routes, for 7.25%

Requirements regarding additional tourism activities

The visitors provided some recommendations suggesting improvements in these aspects.

- ① Ecotourism to sustain naturalness, for 42.75%.
- ② Shows of local cultures, for 22.50%
- ③ Gift and souvenir shops, for 11.25%

Requirements regarding additional tourism development

The visitors provided some recommendations suggesting improvements in these aspects.

- ① Landscape and cleanness of the tourism sites, for 41.00%
- ② Additional amenities, such as direction signs, details of tourism sites, etc, for 32.75%
- ③ Convenient and sufficient parking lots and transportation system, for 21.25%
- ④ Additional shows of community cultures, for 13.75%

Other additional recommendations

The visitors provided some recommendations suggesting improvements in these issues.

- ① Garbage management, for 34.00%
- ② Additional amenities, such as direction signs, visitor accommodation, light in night time, for 30.75%
- ③ Clean and sufficient restrooms, for 23.00%

- ③ Website promoting clear information of the tourism sites, for 21.75%
- ⑤ Sufficient parking lots, for 11.25%
- ⑥ Reforestation activities, for 3.75%

6) Information of Mae Wang tourism sites

Based on in-depth interview data from 13 interviewees, the potential of recreational tourism sites in Mae Wang community, the attitude of the community towards tourism, tourism management at present, problems and limitations of tourism management are shown in Table 2. The frequency of opinions show in table 2 is the number of interviewees that have the same opinions and it is reflecting on the importance of tourism supply issues that communities want to develop.

Table 2. A summary of important information about tourism sites in Mae Wang Community based on the content analysis from the in-depth interviews data.

Important information from the interviews	Frequency (persons)
Potential of tourism sites	
1. Attractive characteristics of tourism sites in Mae Wang Community are naturalness, abundance of forests, and diversity of recreational activities	13
2. There are no signs showing clear directions for entering tourism sites. There are no route maps inside tourism sites or at tourist spots. A number of public transportation vehicle is low.	8
3. There are amenities in tourism sites, such as shops, restaurants, accommodation, parking lots, etc. During a regular time, these amenities are sufficient for serving visitors. However, in high seasons with many visitors, all amenities are insufficient.	5
4. Agricultural tourism sites in Agricultural Research Centers and royal projects are popular among visitors who come for recreational benefits in winter.	5
5. Roads connecting visitor spots in some areas have not been developed. Access is difficult. Some discovered tourism sites are still inaccessible.	5
Attitude of the community toward tourism	
1. The community has a good attitude toward tourism and gives warm welcome to visitors.	13
2. There are no protester groups or persons who lose benefits from tourism. There are only those who receive direct benefits, indirect benefits, and the conservation group.	6
3. The community prefers conservative tourism that promotes maintenance of natural resources and tourism management by the community	5

Important information from the interviews	Frequency (persons)
4. The community does not want an excessively capitalist form of tourism because it will affect resources utilization and economic benefits that should belong to villagers	4
Pattern of recreational tourism management of Mae Wang Community at present 1. Tourism of Mae Wang Community is managed by local people at each tourism site. There are resolutions of the community for controlling businesses and utilization of resources. The management is inspected by villagers and community leaders, and it is under care and control of Mae Win Sub-district Administration Organization	8
2. Elephant businesses are allowed to be operated independently. There is no permanent staff at waterfalls. Cleanness is maintained by asking for cooperation from guides and visitors. The village headman of each area is responsible for inspecting the operation.	4
Problems and limitations of tourism management	
1. Tourism sites here have problems with garbage from visitors and from villagers who live up along Mae Wang River.	6
2. Elephant camp businesses cause a problem of elephant dung and also a problem of having many elephant keepers coming from outside.	6
3. There is a lack of public relations regarding tourism and community products. Most Thai visitors do not know there are famous community products here.	6
4. In general, the current problems of tourism management should be solved by improving regulations for shops in terms of beauty, tidiness, and cleanness.	5
5. Some area does not receive full benefits from entering of visitors. If villagers unite and set a clear form of services, that would help the community to gain more benefits from visitors.	4
6. During a dry season, water quantity is low, and rafting businesses are affected. Elephant camps are also affected because elephants need water	4
7. Most areas are located inside the boundary of a National Reserved Forest, and the owners have no legal rights. Thus there are limitations regarding land use.	4

Important information from the interviews	Frequency (persons)
8. There is a problem of the communication system. There is no telephone signal in some areas. This is an obstacle of homestay entrepreneurs in contacting with customers.	3
9. Regarding tourism management by the community, some communities need to have more strength. Some members of these communities have conflicting opinions, and common agreements cannot be made.	2
10. Most trips of visitors are one-day trips, which affect homestay businesses	2

When considering the study of tourism demand and supply, it is found that there is consistency in the nature of Mae Wang tourism sites that have the attraction in abundant natural resources, a lot of recreational activities and a good attitude of the community towards tourism. But there are also weaknesses in access to tourism, facilities, cleanliness and public relations. In addition, visitors also have suggestions to improve attractions. The management of natural attractions in Mae Wang when considering on the visitor's demand and tourism supply can be defined as follows.

(7) Demand management guidelines

① Tourism management must focus on maintaining the integrity of nature because the study found that the highlight of Mae Wang tourism site is the abundance of natural resources that consistent with the study of Chuchart (2001b).

② Add more recreational activities related to natural exposure and activities for older visitors. Because of the tourism sites in Mae Wang have a beautiful landscape and the results of the study also found that most visitors favor natural traveling in groups and the number of visitors with groups aged 40 are still few. Therefore, tourism sites should add more recreational activities suitable for middle-aged people who have more purchasing power to add new visitor groups.

③ Add more channels of public relations about tourism sites, an abundance of natural resources, various recreational activities and easy access to tourism sites but low cost. Moreover, the tourism programs that introduce valuable things and tourism site in the community should be organized. For example, there might be a 1-day trip program or 2-or-3-day trip programs. These programs should be promoted well to ensure that visitors know about them.

④ Add more the attractiveness of local special events such as blooming flowers at Khun Wang or Songkran festival at Mae Win, etc. to increase the attraction for visitors. According to an important concept of the tourism that the attraction is probably an event or tourism resources (Chuchart, 2001a).

(8) Supply management guidelines

① A way to promote community participation. The study found that tourism sites still lack a clear tourism management plan. Therefore, the local government agency, Mae Win Sub District Administrative Organization and the community should have a joint plan to manage and take care of the utilization of tourism resources that cover the control of recreational activities of visitors that consistent with tourism development concept of Rotrungsat (2010) that Tourism is a service industry that needs a good attitude from the community in providing visitor services. Therefore, the community should be involved in development decisions.

② Approach to management on accessibility to the tourism sites. According to the studies, it has been found that tourism sites are also lacking accessibility components. Therefore, tourism sites should be added prominent signs along the main route and should have information about directions and the tourist spots for the visitors. Moreover, it should also develop routes that connect all tourism sites for easy access for visitors.

③ An approach to amenities management for visitors should be well-managed. These amenities include electric light, car parks, garbage management facilities, toilets, service and information center, and accommodation for visitors.

④ Service shop enhancing service standards. Service shop should manage the orderliness, landscape, cleanliness, and beauty to create a good image of tourism

⑤ An approach to managing the security of tourism sites. A risk management plan should be made in order to maintain security in the tourism site. There should also be officers and equipment for taking care of security issues in the primary stage.

⑥ Next generation community leaders should be developed to allow them to be able to move community tourism forwards in the future.

⑦ Several forms of tourism that are an identity of the community should be developed and integrated. These forms include cultural tourism, conservative tourism, sufficiency-economy village, etc.

⑧ The approaches to the development of new tourism routes. According to studies, it has been found that there are many attractions that have not yet launched. The community should have a development approach to prepare the facilities of such attractions and to launch a new tourist attraction.

6. Suggestions

Local governments should study the feasibility of charging fees, the establishment of Tourism Development Fund and visitor information center and form a plan to earn an income from visitors in order to distribute more income to the community.

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