

Visitors Characteristics, Motivations and Support for Management Action for  
Erawan National Park, Kanchanaburi, Thailand

Ms. Thunvadee Hethark

93  
A Thesis Submitted in Partial Fulfillment of the Requirements  
for the Degree of Master of Business Administration in Tourism Management  
Graduate School of Business  
Assumption University  
Academic Year 2010  
Copyright of Assumption University



Visitors Characteristics, Motivations and Support for Management Action for  
Erawan National Park, Kanchanaburi, Thailand



Ms. Thunvadee Hethark

A Thesis Submitted in Partial Fulfillment of the Requirements  
for the Degree of Master of Business Administration in Tourism Management  
Graduate School of Business

Assumption University

Academic Year 2010

Copyright of Assumption University

Thesis Title                      Visitors Characteristics, Motivations and Extended Support  
for Management Actions for Erawan National Park,  
Kanchanaburi, Thailand  
By                                      Ms. Thunvadee Hethark  
Thesis Advisor                      Adarsh Batra, Ph.D.  
Academic Year                      2010

---

The Graduate School/Faculty of Business, Assumption University, has approved this thesis as a partial fulfillment of the requirements for the Degree of Master of Business in Tourism Management

School of Business                      K. Phothikitti                      Dean of the Graduate

(Kitti Phothikitti, Ph.D.)

THESIS EXAMINATION COMMITTEE

John Arthur Barnes                      Chairman  
(John Arthur Barnes, Ph.D.)

Adarsh Batra                      Thesis Advisor  
(Adarsh Batra, Ph.D.)

Ranee Esichaikul                      External Member  
(Associate Professor Ranee Esichaikul, Ph.D.)

Apichart Intravisit                      Member  
(Apichart Intravisit, Ph.D.)

Jutamas Wisansing                      Member  
(Assistant Professor Jutamas Wisansing, Ph.D.)

## ABSTRACT

The purpose of National Parks is to value regions which have beautiful scenery and abundant resources. This land doesn't belong to anyone, but is owned by the government. National Parks have lots of resources, and activities to attract visitors for traveling. Erawan National Park, in Kanchanaburi, Thailand, is one such place. This research was conducted to examine the characteristics of visitors to Erawan National Park, to determine whether or not there is a significant connection between visitor characteristics, problems encountered by visitors during their stay, and visitors' support for management action by the national park staff, and to determine whether or not there is a significant connection between the motivation of tourists to travel to Erawan National Park and the activities participated in by visitors during their stay in the park.

A set of 384 questionnaires were distributed to Thai and foreign visitors at the selected locations in the Erawan National Park from July to August 2010. Convenience sampling was used. T-test, One-way ANOVA and Pearson Correlation were used to analyze the data.

The study found that most tourists were young and enjoyed their stay in the park, and that slightly more Thais visited than foreigners. There were significant differences in tourists' problem encountered during their visit with regards to nationality, and significant difference in tourists' support for management action with regards to age and nationality. The study further established the relationship between tourists' motivation to visit Erawan National Park and the activities participated in by visitors to Erawan

National Park. The result demonstrates the potential for and necessity of an expanded ecotourism program in Erawan National Park.

Keyword: Kanchanaburi National Park, visitor characteristic, motivation activity



## ACKNOWLEDGEMENT

This thesis is a result of my attention and hard work. I would like to thank everyone who helped, encouraged and supported me.

First and foremost, I want to thank my advisor, Dr. Adarsh Batra, for the unwavering support he showed me, his tolerance, worthy recommendation, valuable time, guidance, enthusiasm, and everything else he did for me.

I would also like to show appreciate for the committee members, Dr. John Arthur Barnes, Dr. Apichart Intravisit, and Dr. Jutamas Wisansing, who shared their opinions, suggestions, and guidance with patience and encouragement.

I would like to thank the staff at Erawan National Park for understanding and offering their support this research. They explained much about Erawan National Park to me and gave me extensive information which supported my report. The staff at Erawan National Park reliably helped me with the distribution of questionnaires. I'm greatly appreciative of their help.

I proudly thank my family, especially my aunt. They have always supported, understood and helped me, and have never left me alone. They always stayed by my side and encouraged me to achieve my goal.

I would like to give special thanks to my respondents, who donated their valuable time to provide me with answers to my questionnaires. This thesis could not have been completed without all the respondents.

Finally, I would like to thank my friends who always gave me answers when I asked questions. They always helped, encouraged and supported me to succeed in writing this thesis.

Thunvadee Hethark

2010





## TABLE OF CONTENTS

	Page
ABSTRACT.....	i
ACKNOWLEDGEMENT.....	iii
TABLE OF CONTENTS.....	v
LIST OF TABLES.....	viii
LIST OF FIGURES.....	x
CHAPTER 1 - GENERALITIES OF THE STUDY	
1.1 Background of the study.....	1
1.2 Statement of Problem.....	16
1.3 Research Objectives.....	18
1.4 Scope of the Research.....	19
1.5 Limitations of the Study.....	19
1.6 Significant of the Study.....	20
1.7 Definition of Terms.....	21
CHAPTER 2 – REVIEW OF RELATED LITERATURE AND STUDIES	
2.1 National Park Management in Thailand.....	23
2.2 Management Strategy for National Parks in Thailand.....	27
2.3 Categorizing Tourists to Thai National Parks.....	29
2.4 Tourists Activities in Thai National Parks.....	30
2.5 Tourists Motivations for Visiting Thai National Parks.....	32



2.6 Problems Faced by Tourists to National Parks.....	33
2.7 Empirical Studies.....	34

### CHAPTER 3 – RESEARCH FRAMWORK

3.1 Theoretical Framework.....	42
3.2 Conceptual Framework.....	44
3.3 Research Hypotheses.....	45
3.4 Operationalization of the Independent and Dependent Variables.....	47

### CHAPTER 4- RESEARCH METHODOLOGY

4.1 Method of Research of Used.....	51
4.2 Respondents and Sampling Procedures.....	53
4.3 Research Instruments/Questionnaire.....	56
4.4 Collecting of Data/Gathering Procedures.....	56
4.5 Pre-test.....	56
4.6 Statistical Treatment of Data.....	57

### CHAPTER5 – DATA ANALYSIS

5.1 Demographic Information, Visitor Trip Characteristic and Overall Experience.....	59
5.2 Motivation for Visiting Erawan National Park.....	71
5.3 Activities Participated in at Erawan National Park.....	72

5.4 Problems Encountered during stay in Erawan National Park.....	74
5.5 Recommended Management Action.....	75
5.6 Hypothesis Testing.....	77

## CHAPTER 6 - SUMMARY, CONCLUSION, AND RECOMMENDATIONS

6.1 Summary of Findings .....	111
6.2 Discussion .....	113
6.3 Conclusion.....	131
6.4 Recommendations .....	132
6.5 Further Research.....	133
<b>References</b> .....	135
<b>Appendix A (Questionnaire English – Version)</b> .....	140
<b>Appendix B (Questionnaire Thai – Version)</b> .....	146

## LIST OF TABLES

	Page
<b>Table 1.1</b> International Tourism Statistics in Thailand 1998-2007.....	2
<b>Table 1.2</b> Domestic Tourism Statistics in Thailand 1998-2007.....	3
<b>Table 2.1</b> Empirical Studies.....	34
<b>Table 3.4</b> Operationalization of Dependent Variables.....	47
<b>Table 3.5</b> Operationalization of Independent Variables.....	50
<b>Table 4.1</b> Tourists statistics.....	52
<b>Table 4.2</b> Theoretical Sample Sizes for Different Sizes of Population and ..... a 95 percent level of certainty	52
<b>Table 4.3</b> The result of Cronbach's Alpha analysis.....	56
<b>Table 4.4</b> Statistical test of each hypothesis.....	58
<b>Table 5.1</b> Gender of Visitors.....	59
<b>Table 5.2</b> Age of Visitors.....	61
<b>Table 5.3</b> Nationality of Visitors.....	62
<b>Table 5.4</b> Number of Visits.....	63
<b>Table 5.5</b> Length of Stay.....	65
<b>Table 5.6</b> Purpose of Visit.....	66
<b>Table 5.7</b> Size of Group.....	68
<b>Table 5.8</b> Category of Visitors.....	69
<b>Table 5.9</b> Overall Experience in Erawan National Park.....	70



<b>Table 5.10</b>	Mean and Standard Deviation of Motivation.....	72
<b>Table 5.11</b>	Mean and Stand Deviation of Activities.....	73
<b>Table 5.12</b>	Mean and Stand Deviation of Problem.....	74
<b>Table 5.13</b>	Recommended Management Action.....	76
<b>Table 5.14</b>	T-Test for Hypothesis 1.....	78
<b>Table 5.15</b>	One Way ANOVA for Hypothesis 2.....	83
<b>Table 5.16</b>	T-Test for Hypothesis 3.....	85
<b>Table 5.17</b>	Group Statistics for Hypothesis 3.....	89
<b>Table 5.18</b>	T-Test for Hypothesis 4.....	91
<b>Table 5.19</b>	One Way ANOVA for Hypothesis 5.....	95
<b>Table 5.20</b>	T-Test for Hypothesis 6.....	98
<b>Table 5.21</b>	Group Statistics for Hypothesis 6.....	105
<b>Table 5.22</b>	Pearson Correlation Coefficient for Hypothesis 7.....	107
<b>Table 5.23</b>	Pearson Correlation Coefficient for Motivation ..... and Activities by visitors	110
<b>Table 6.1</b>	Summary of respondents for demographic, visitor's characteristic.... and overall experience in Erawan National Park	111
<b>Table 6.2</b>	Summary of Hypothesis testing results.....	113

## LIST OF FIGURES

	Page
<b>Figure 1.1</b> Kanchanaburi Map.....	13
<b>Figure 3.1</b> Theoretical framework for ecotourism development potential .....	43
<b>Figure 3.2</b> Conceptual framework for the study.....	44
<b>Figure 5.1</b> Gender of Visitors.....	60
<b>Figure 5.2</b> Age of Visitors.....	61
<b>Figure 5.3</b> Nationality of Visitors.....	62
<b>Figure 5.4</b> Number of Visits.....	64
<b>Figure 5.5</b> Length of Stay.....	65
<b>Figure 5.6</b> Purpose of Visit.....	66
<b>Figure 5.7</b> Size of Group.....	68
<b>Figure 5.8</b> Category of Visitors.....	69
<b>Figure 5.9</b> Overall Experience in Erawan National Park.....	71

## **CHAPTER1**

### **GENERALITES OF THE STUDY**

#### **1.1 Background of Study**

Tourism has become important for many countries in the world, including Thailand. In order to promote Thailand's tourist destinations and attract tourists, Thailand launched "Visit Thailand Year" in 1987. The number of foreigners increased noticeably during this time, and the years between 1987 and 1996 became the Golden Decade of Thai tourism. Unparalleled economic growth also aroused local tourism. In 1997, the number of domestic tourists was evaluated by a Thailand Development Research Institute study at 42.5 million (TDRI Quarterly Review, 1997). From 1998 to 2007, the Tourism Authority of Thailand collected statistics about domestic and international tourists who came to Thailand. The resulting study, "Tourism Statistics in Thailand 1998-2007" (Table 1.1) showed the number of international and domestic tourists, the average length of stay, the average expenditure, and the revenue generated by tourism each year.

According to table 1.1, the number of tourists increased every year between 1998 and 2002. In 2003, the number of tourists decreased, and this caused revenue to decrease. The number of international tourists increased again in 2004, and revenue increased as well. Unfortunately, in 2005, international tourists decreased again. The tourists didn't spend as much money, and Thailand didn't earn as much income. In 2006-2007, the economy grew again; the international tourists spent more money, and Thailand earned good revenue.



**Table 1.1 International Tourism Statistics in Thailand 1998-2007**

Year	International						
	Tourist		Average	Average Expenditure		Revenue	
	Number	Change	Length of Stay	/person/day	Change	Million	Change
	(Million)	(%)	(Days)	(Baht)	(%)	(Baht)	(%)
1998	7.76	+ 7.53	8.40	3,712.93	+ 1.12	242,177	+ 9.70
1999	8.58	+ 10.50	7.96	3,704.54	- 0.23	253,018	+ 4.48
2000	9.51	+ 10.82	7.77	3,861.19	+ 4.23	285,272	+ 12.75
2001	10.06	+ 5.82	7.93	3,748.00	- 2.93	299,047	+ 4.83
2002	10.80	+ 7.33	7.98	3,753.74	+ 0.15	323,484	+ 8.17
2003	10.00	- 7.36	8.19	3,774.50	+ 0.55	309,269	- 4.39
2004	11.65	+ 16.46	8.13	4,057.85	+ 7.51	384,360	+ 24.28
2005	11.52	- 1.51	8.20	3,890.13	- 4.13	367,380	- 4.42
2006	13.82	+ 20.01	8.62	4,048.22	+ 4.06	482,319	+ 31.29
2007	14.46	+ 4.65	9.19 <sup>P</sup>	4,120.95 <sup>P</sup>	+ 1.80	547,782 <sup>P</sup>	+ 13.57

Source: TAT, 2007

Thai tourists preferred to travel within the country; table 1.2 shows that the number of domestic tourists increased every year between 1998 and 2007. However, the average expenditure of domestic tourists didn't increase every year. The total revenue increased from 1998 to 2007 in Thailand.

It is important to distinguish between ecotourism and other types of tourism.

Although ecotourism focuses on activities such as viewing wildlife and visiting national parks, not all who participate in such activities can be defined as ecotourists. Ecotourism, by definition, must have conservation and education as priorities, and cause a minimal negative impact on the local community.

**Table 1.2 Domestic Tourism Statistics in Thailand 1998-2007**

Year	Domestic						
	Thai Visitor		Average	Average Expenditure		Revenue	
	Trip	Change	Length of Stay	/person/day	Change	Million	Change
	(Million)	(%)	(Days)	(Baht)	(%)	(Baht)	(%)
1998	51.68	- 0.72	2.37	1,512.70	+ 3.19	187,897.82	+ 4.16
1999	53.62	+ 3.02	2.43	1,523.55	+ 2.29	203,179.00	+ 7.42
2000	54.74	+ 2.08	2.48	1,717.77	+ 12.75	210,516.15	+ 3.61
2001	58.62	+ 7.09	2.51	1,702.70	- 0.88	223,732.14	+ 6.28
2002	61.82	+ 5.45	2.55	1,689.52	- 0.77	235,337.15	+ 5.19
2003	69.36	+ 12.20	2.61	1,824.38	+ 7.98	289,986.81	+ 23.22
2004	74.80	+ 7.84	2.60	1,852.33	+ 1.53	317,224.62	+ 9.39
2005	79.53	+ 6.33	2.73	1,768.87	- 4.51	334,716.79	+ 5.51
2006	81.49	+ 2.46	2.65	1,795.09	+ 1.48	365,276.28	+ 9.13
2007	83.23	+ 2.14	2.63	1,767.35	- 1.55	380,417.10	+ 4.15

Source: TAT, 2007

### 1.1.2 Tourism in Thailand

Most tourists realize that Thailand has beautiful scenery, including beaches, sea, mountains and forests. Tourists travel to Thailand because they want to get in touch with nature. The word for nature in the Thai language is “thammachart”. However, “thammachart” has a different meaning than the English word “nature”. “Thammachart” means elegance (Rigg, 1997). When western environmentalists refer to “nature”, the meaning is uncivilized, wild forest (Stott, 1991). Nature also relates to ecotourism and sustainable tourism. Both ecotourism and sustainable tourism have the goal of preserving natural resources. Ecotourism refers to “responsible travel to natural areas which

conserve the environment and improve the welfare of the local people” (Hvenegard and Dearden, 1993). Ecotourism focuses on natural and undisturbed areas, such as protected areas and national parks (Boyd, Butler, Haider and Perera, 1994). The main purposes of protected areas are to preserve biodiversity, conserve natural resources, and provide public access (Government of Thailand 1961). Ecotourism affects the sustainability of natural resources used at ecotourism sites in several ways (Steel, 1995).

### **1.1.3 Ecotourism in Thailand**

Thailand’s reputation as a destination endowed with great natural beauty makes it a very popular destination for nature tourism, and ecotourism in Thailand generally focuses on three areas: visiting national parks, hilltribe trekking, and nature trekking. Much of this tourism occurs in Thailand’s 148 national parks.

More than 11.5 million tourists visited national parks and protected areas in Thailand in 1994 (National Parks Division, 1995). This number was 5 million greater than the number of people who had visited national parks in Thailand in 1985 (Kasetstart University, 1987). Research found that 33% of domestic tourists and 20% of international tourists visited Doi Suthep National Park (Elliott, 1992). In addition, 22% of Thai tourists and 5% of foreign tourists visited Doi Inthanon in Chiang Mai.

However, not all of the tourists who visited the national parks could classify as ecotourists, because of their activities, and the impact they left on the environment. For example, the research found that 75% of Doi Inthanon National Park tourists participated in forest trekking, 21% were interested in wildlife, and 75% of tourists wanted more facilities to support viewing wildlife (Elliott, 1992).



Tourists who desired more facilities for viewing wildlife could also be found in the other national parks. 20.4% of international tourists in Khao Yai National Park believed that wildlife viewing was the most important thing to do when travelling to national parks. Also, 11.4% needed more facilities for wildlife viewing. 24% of international tourists preferred the chance for wildlife viewing, and 15.7% wanted more bird watching (Dixon and Sherman, 1990).

Another form of ecotourism, hilltribe trekking, started in northern Thailand more than 25 years ago. Its growth exceeded 100,000 individual trekkers per year (Dearden and Harron, 1994). Hilltribe trekking involves hiking with a guide and staying overnight (Dearden, 1991). The main objective of hilltribe trekking is to get away from the cities, get in touch with nature, and gain new experiences.

The third type of ecotourism, nature trekking, has been defined by the concepts of conservation and sustainability (Brockelman and Dearden, 1990). Trekking programs at a village near Khao Yai National Park created more revenue for local people, developed a relationship between the park and villagers, and indirectly reduced poaching.

Despite the benefits of ecotourism, there are potential drawbacks as well. Although it is less harmful to local communities and the environment than other forms of tourism, ecotourism still make significant impacts. Local communities can become economically dependent on ecotourism, especially when the protection of neighboring land makes use of natural resources illegal. Wild animals can become accustomed to the presence of humans, making them vulnerable to poachers and potentially dangerous to local communities.

However, in a protected area where mass tourism has become the standard, the development of ecotourism is critical, to protect the resources and communities of the protected area and to educate visitors about the environment.

#### **1.1.4 Sustainable Tourism**

Sustainable tourism is defined as the sustained growth of tourist arrivals and continuous development which “meet the needs of the present without compromising the ability of future generations to meet their need” (WCED, 1987). On the other hand, Clarke (1997) identified four positions on sustainable tourism. The first position states that sustainable tourism is different than mass tourism, in that it is usually small-scale, whereas mass tourism is managed on a large, unsustainable scale. However, sustainable tourism can also cause a negative impact in some areas (Twining-Ward, 1999). The second states that scale is a defining attribute of sustainable tourism, and that sustainability is exclusive to small-scale tourism (Clarke, 1997). The third position explains that mass tourism can create more sustainability than small-scale tourism, and that sustainability is an accomplishment, rather than an inherent quality, of small-scale tourism. The fourth position is of concurrence. For this position, sustainable tourism is defined as a goal which is suitable to all tourist enterprises, regardless of scale.

#### **1.1.5 Green Tourism**

The definition of green tourism is not different from ecotourism and sustainable tourism. Green tourism means tourism which has a minimal effect on natural resources (Highland and Island Enterprise, 2010).

In order to conserve the Thai travel and tourism industry, TAT is concerned about environmental responsibilities and willing to develop a long term and sustainable industry for the next generation. The new “Seven Greens” project and the Thailand Tourism Award ensure that the local tourist industries maintain powerful and sufficient global marketing efforts (TAT, 2009).

TAT’s Seven Greens program is intended to protect and conserve the environment. The concepts of the Seven Greens promote awareness of the environment and resources. The implementation focuses on seven areas:

1. Green Heart: to encourage tourists’ awareness of the environment as well as to protect and conserve all tourist destinations.
2. Green Logistics: to promote environmentally friendly tourist transportation, which minimizes environmental impacts?
3. Green Destination: to encourage the responsibility of tourist destinations to be environmentally friendly.
4. Green Communities: to encourage communities, both rural and urban, to emphasize environmental responsibility, support conservation of natural resources, and maintain local customs.
5. Green Activities: to promote activities which are suitable to local communities, and ensure tourists’ experiences are appropriate to the local culture and environment.
6. Green Service: to promote tourism related service that creates a positive impression on tourists, wins hearts and minds by achieving higher quality, and cares for and concentrates on the environment.



7. Green Plus: to support Corporate Social Responsibility (CSR) among tour operators, by encouraging them to return assistance to the communities which they work with.

Source: [http://www.tatnews.org/tat\\_news/3852.asp](http://www.tatnews.org/tat_news/3852.asp)

Although the Seven Greens project demonstrates the TAT's support for green tourism, Thailand's most popular national parks continue to be inundated with tourists in the high season, many of whom learn nothing about the environment. As large groups leave large environmental impacts, this model of mass tourism is unsustainable. Small-scale, sustainable ecotourism stands out as an alternative to the mass tourism currently practiced in many of Thailand's national parks, and a way to promote the TAT's Seven Greens.

#### **1.1.6 National Parks**

The National Parks Act of 1961 defined that a national park is "the land which includes rivulets, mountains, watercourses, seashores...". It was created to value regions which have beautiful scenery and abundant resources. This land doesn't belong to anyone, but is owned by the government (National Park Act, 1961). The national park can protect watersheds and soils, and work to preserve flora and fauna. In addition, they provide knowledge and research to educate tourists and the public, and help maintain local culture and values. The World Tourism Organization reported that they also function to promote tourism in developing countries, among both foreign and domestic tourists (WTO and UNEP, 1992).

### 1.1.7 National Parks in Thailand

In 1960, Khao Yai National Park was designated as the first of Thailand's national parks, under the National Park Act. Today, there are 148 national parks in Thailand, both terrestrial and marine (Department of National Parks, Wildlife, and Plant Conservation, 2004). As Thailand's oldest and most famous national park, Khao Yai is and has been the location of numerous conservation efforts, such as the Khao Yai Conservation Project, a joint effort between the Royal Forest Department and the NGO WildAid, aimed at training rangers to maintain the biodiversity of the park (Ross, 2003). Following the designation of Khao Yai National Park, Thailand established a Protected Area System, which, as of 2003, included 319 protected areas (Chettamart, 2003). The National Park Act operates according to the following objectives:

- To preserve and maintain the ecosystem integrity, biodiversity, and scenic beauty for use by the present and future generations without compromising them;
- To provide the general public as a ground for education and research;
- To provide the general public the opportunities for nature tourism and recreation, which are compatible with the park ecosystem and its carrying capacity.

Source: Chettamart, 2003, citing Khomkris, 1965; Faculty of Forestry, 1987.

The national parks in Thailand need to be managed and developed for ecotourism and sustainable tourism. The government must be concerned about the social, cultural,

and environmental impacts of tourism. Also, it is the responsibility of the government to set the policy to protect the national parks.

Thailand's national parks can be divided into two broad groups. The first of these groups are the marine national parks of the south. These parks protect large stretches of underwater habitat such as coral reefs, in addition to islands and coastal areas contained within their boundaries. The second group are the terrestrial national parks. These national parks are found throughout Thailand, and protect the resources of the nation's interior, including mountains, waterways, and forests.

The national parks in Thailand need to be managed and developed for ecotourism and sustainable tourism. The government must be concerned about the social, cultural, and environmental impacts of tourism. Also, it is the responsibility of the government to set the policy to protect the national parks. However, many of the national parks suffer from overdevelopment and over visitation. Mass tourism has become the standard in the more popular national parks, and some, such as Ko Samet Marine National Park, have become polluted and overcrowded, and lost much of what made them a national park in the first place.

In order to identify the national parks most at risk from mass tourism, it is necessary to examine the national parks which receive the most visitors every year. The most visited national parks in 2009 included Doi Suthep, Khao Yai, Pa Hin Ngam, Doi Inthanon, and the subject of this study, Erawan National Park (DNP, 2009). Each of these either features a famous attraction that draws tourists to the park, is located within a convenient distance of a major population center such as Bangkok or Chiang Mai, or

both. For example Doi Inthanon National Park is popular to its proximity to Chiang Mai, and its status as the location of the highest point in Thailand. Pa Hin Ngam National Park is popular due to the famous rock formations, and Khao Yai National Park is popular due to its being the first of Thailand's national parks, and one of the most easily accessible from Bangkok. Erawan National Park is popular due to its proximity to Bangkok, and for the famous Erawan waterfall.

The popularity of these parks places them at a higher risk from the effects of tourism than less visited and less accessible national parks, and therefore makes research into tourism to these areas urgent.

#### **1.1.8 Flora and Fauna**

Today, about a quarter of Thailand is covered with forest. About a quarter of Thailand's forests are monsoon forests, and half of Thailand's forests are rain forests. The monsoon forests are seasonal, and the trees shed their leaves during the dry season, whereas the rain forests are evergreen, and occur mostly in the south. Other types of forests, including pine forests and fresh water swamp forests, occur in regions throughout the country (Ross, 2003).

However, in 1950, forests covered approximately 75% of Thailand, and over the course of the 20<sup>th</sup> century, most of the forest was cleared, and the remaining forest mainly occurs in remote, mountainous regions (Ross, 2003). In the two decades between 1961 and 1985, almost half of Thailand's forests were lost, and today, an estimated 165,000 people illegally live in protected areas (Weaver, 2001). Forest preservation has become a major concern of the Thai government, and in 1989, a complete logging ban was passed



into law (Ross, 2003). The Ministry of Science, Technology and Environment was the department responsible for the management Thailand's biodiversity, until the establishment of the Ministry of Natural Resources and Environment in 2003. Several laws have been created to address the loss of forests, including the *Forestry Act* of B.E. 2484 (A.D. 1941), the Plant Variety Protection Act and Protection and Promotion of Intellectual Thai Traditional Medicine Act in 1999, and the Prime Minister's Office's regulation on the Conservation and Utilization of Biodiversity in 2000 (Ross, 2003).

Thailand's fauna is also diverse, and contains many endangered species. The International Union for Conservation of Nature lists over 900 species of bird, 300 reptiles, 107 amphibians, 1,900 fish, and thousands of insects and invertebrates. Of these, more than 47 are considered threatened (IUCN, 2009). Among the mammals, the tigers present a notable concern. As of 2003, the tiger population stood around 200 or 300, restricted mainly to certain national parks. The tigers are a frequent target for poachers, due to their use in Chinese medicine. Park rangers are underpaid, and will sometimes accept bribes to assist the poachers (Ross, 2003).

#### **1.1.9 Why National Parks are Important to Thailand?**

Most people believe that natural resources are important to preserve. If people are not willing to make the effort to preserve them, the resources will not be available for future generations. People will always be affected when resources are destroyed. For example, Thai people have made an effort to preserve Thailand's elephants, because elephants are a symbol of Thailand. If Thai people fail to protect elephants, there won't be any elephants left for the next generation. National parks, in addition to being popular tourist

destinations, are committed to the preservation and protection of natural resources. The main objective of a national park is to preserve the resources and minimize the effect of humans on the environment. Visitors to a national park can get in touch with nature and see beautiful things, such as animals, forests, and waterfalls. Park officers are present to assist visitors to the park, to guide and explain to them about the natural resources. Tourists can learn about natural resources, and gain an understanding of why they are important to protect.

As the home to a great variety of flora and fauna, including some highly endangered species, National Parks are especially important in Thailand. Visitors can learn about the plight of the endangered species, and the money provided to the park can be used, directly or indirectly, to ensure their long-term survival. In addition, Thailand has gained a reputation as being a good place to see wildlife, and many people travel to the national parks of Thailand in hopes of spotting tigers or wild elephants.

#### 1.1.10 Tourism in Kanchanaburi Province

**Figure 1.1: Kanchanaburi Map**



Source: [www.kanchanaburi.com](http://www.kanchanaburi.com)

Kanchanaburi is located where the River Kwai Noi and the River Kwai Yai merge with the MaeKlong River. The most famous chapter of Kanchanaburi's history was during World War 2, when the Japanese Imperial Army constructed the "Death Railway", with its famous "Bridge over the River Kwai". Today, both domestic and foreign tourists come to travel in this province. Most of the tourists are Thai, and male. The average age of the tourists is middle-aged. Activities in Kanchanaburi include rafting, trekking, and visiting forests. Kanchanaburi has many attractions for tourists, such as the Death Railway Bridge, Saiyok Noi, Saiyok Yai Waterfall, and Erawan National Park.

#### **1.1.11 Erawan National Park**

Erawan National Park is located in Kanchanaburi Province, in Amphoe Sri Sawat. It was established in 1975, as Thailand's 12<sup>th</sup> national park. The park covers an area of 550 square kilometers, consisting mainly of high mountains (Athrun, 2008). The highest mountains are located in the east of the park, rising to 996 meters, with sheer limestone cliffs. This protects the park from the eastern monsoon, and results in a low average rainfall. In 2006, Erawan National Park was awarded the Thailand Tourism Award by the Tourism Authority of Thailand (TAT, 2006). Erawan National Park is accessible by road from Sai Yok National Park to the west, and by highway 323 from Kanchanaburi, to the south.

As one of Thailand's oldest and most popular national parks, successful conservation is of particular importance to Erawan National Park. In addition to being more at risk than the more remote national parks, the successes and failures of the national park also have a stronger impact on the surrounding communities.

### **1.1.12 Flora and Fauna of Erawan National Park**

81% of the forest in Erawan National Park is mixed deciduous forest. Common tree species include makha (*Azelia xylocarpa*), tokian (*Hopea odorata*), Burma padauk (*Pterocarpus macrocarpus*), and hog plum (*Spondias pinnata*). Other forests types within the park are dry dipterocarps and dry evergreen forest. Common plant species in these areas include Taengwood Balau (*Shorea obtusa*), Dark Red Meranti (*S. siamensis*), and *Xylia xylocarpa* (Department of National Parks, Wildlife and Plant Conservation, 2006).

Erawan National Park is home to several species of endangered mammals, including tigers, elephants, serows, and white-handed gibbons. There are also many species of reptile, amphibian, bird, and freshwater fauna (DNP, 2006).

### **1.1.13 Services Available in Erawan National Park**

The staffs of Erawan National Park are available to give information to tourists at every point in the park. For tourists who are interested in nature trekking, there are tour guides available, to show the tourists around and teach them about the natural resources of the park. There is a souvenir shop in the park area. Most of the merchants and park staff are local people. The national park provides job opportunities for local communities, and increases local revenue.

Facilities available in Erawan National Park include:

- Car Parking
- Restrooms
- Food service



- A visitor center, providing maps and information from 8:30 AM to 4:30 PM
- Accommodation (bungalows, terrace house, camping)

Source: DNP, 2004

#### **1.1.14 Activities in Erawan National Park**

The most popular attraction in Erawan National Park is the Erawan waterfall, a series of seven terraced cascades stretching 1500 meters through the jungle. The highest of the waterfall's seven terraces features a rock shaped like an elephant head, which give the waterfall, and the national park, its name. The park also features smaller waterfalls, and several caves (DNP, 2006). Erawan National Park provides many kinds of activities for tourists visiting the park, including bird and butterfly watching, trekking, biking, and nature walks (DNP, 2004). While enjoying these activities, visitors can get in touch with nature and learn about the park's natural resources. The park has staff available to assist visitors. Popular activities include sightseeing, taking photographs, and swimming in the waterfall.

#### **1.2 Statement of the Problem**

As a destination, Erawan National Park is most popular as a daytrip from Kanchanaburi, usually as part of a package tour of the province. Normally, the waterfall is the only location within the park that is visited. Erawan National Park is a park endowed with gorgeous scenery and abundant natural resources, and is easily accessible from Bangkok. This makes it a naturally popular tourist destination, for both domestic tourists looking for a quick excursion from the capital, and foreigners touring Kanchanaburi Province.

The beauty and accessibility of Erawan National Park make mass tourism inevitable, and open up a range of benefits and problems, that need to be addressed.

However, not everyone who visits a national park is aware of the need for conservation, and some are unaware of how to behave when visiting a national park. Visitors oftentimes wander off of the trails, trampling plants and causing the degradation of the local wildlife. Other visitors attempt to bring plants or animals home with them as a souvenir. The focus is on a quick, inexpensive, and convenient tour, normally for people who are unable to spend a considerable amount of time in the national park. Uncontrolled mass tourism of this sort is, of course, unsustainable. With time, environmental degradation has taken its toll, and Erawan National Park has started to lose the very resources which make it a popular destination. In addition, it runs the risk of developing a reputation as a loud, crowded and unappealing place to visit.

Due to its accessibility, Erawan National Park is one of Thailand's most popular national parks, and operates on a mass tourism model wherein most tourists visit as part of a package tour of Kanchanaburi province. This puts Erawan National Park under great risk from the pollution and overcrowding that accompany mass tourism. In addition, the large groups of tourists associated with mass tourism create large amounts of noise, which greatly reduces the opportunities for viewing wildlife. Despite the popularity of Erawan National Park, there are few statistics available about those who visit it.

Conducting research on the people who visit Erawan National Park will allow a greater understanding of the problems they face, activities they feel interested to participate and what park authorities should do to ensure that the resources of Erawan National Park are available for future generations.

The negative impacts of mass tourism are of particular concern in Erawan National Park for a number of reasons, the foremost of which is the fact that it harbors a number of endangered species. As the primary management objective of Erawan National Park is conservation, the needs of these endangered species must come before the needs of tourists, even if it means a loss of profit.

This is for the purpose of assessing the receptiveness of the respondents to potential ecotourism development, as well as to gauge the concern of the respondents regarding tourism impacts within the park. Establishing a connection with the demographic information, including the age, gender, and nationality of the respondents, will allow a greater understanding of which demographic groups show the greatest amount of concern for the future of the park.

In order to develop a more sustainable model of tourism development for Erawan National Park, it is necessary to understand why people visit the park. Understanding the motivations of visitors becomes important, as do the activities they participate in while they're at the park. In addition, it is necessary to assess the problems encountered by visitors, and their thoughts on the future management of the park.

### **1.3 Research Objectives**

The objective of this study will be to determine the suitability of Erawan National Park for ecotourism development. Despite the popularity of Erawan National Park, there are few statistics available about those who visit it. In this survey, the demographic information of the respondents will be collected, along with their motivations for visiting,

their activities, their support for future management action, and the problems that they have encountered.

1.3.1 To examine the trips characteristics of Erawan National Park visitors.

1.3.2 To analyze Park visitors problems and their support for management action in the Erawan National Park.

1.3.3 To study the relationship between the visitors motivation and activities participations at Erawan National Park.

#### **1.4 Scope of the Research**

Erawan National Park is a national park which is important to the tourism economy and environment of Kanchanaburi. The goal of this research is to understand the activities of tourists and the impact of tourism upon the park, and to analyze how that can be applied to developing sustainable tourism within the park. Activities preferences and motivations are strongly linked to nature. The research uses a questionnaire to collect data and information from the respondents. Respondents include foreign and domestic tourists who are visiting Erawan National Park. The questionnaire consists of the activities in Erawan National Park, the type of tourists, and the length of their stay. The total number of respondents is 384 people, both Thai and foreigners, who are visiting the park.

#### **1.5 Limitations of the Study**

The research focuses on domestic and foreign tourists who are visiting Erawan National Park. The documents are provided in both Thai and English. Although it is a popular park, the official statistics regarding Erawan National Park are few. In addition, tourists



who visit Erawan National Park are normally unaware of concepts of sustainability, and lack knowledge about the potential impact of tourism in national parks. As many tourists do not have extensive knowledge about sustainable tourism, the questionnaire will not cover all the relevant topics.

One of the most popular ways to visit Erawan National Park is with a package tour through the major attractions of Kanchanaburi Province. These tours will often advertise a visit to Erawan waterfall, rather than Erawan National Park, so it is possible that some respondents will not be aware that they are visiting a national park.

### **1.6 Significance of Study**

In addition, Erawan National Park holds great ecological importance, as a refuge for endangered species. Given the dangers that habitat loss and poaching pose to endangered species, it is of critical importance that tourism to Erawan National Park be sustainable and make a minimal impact, so that the park management can focus on their most important task, the protection of the habitats and species within the national park. It is equally important that tourists who visit Erawan National Park be aware of the impact they can potentially have on the environment of a region, and of the challenges faced by the park management in protecting the endangered species within the park. Tourists should know how to assist in the preservation and maintenance of resources to be useful in the future. Through this study the information available on activities available, problems, visitors motivation to visit park and visitors suggestions will equip park managers with sufficient information that can assist in the development of a sustainable, yet profitable, tourism model for Erawan National Park, which will help the park's

popularity grow, while at the same time ensuring that the flora, fauna, and natural environments within the park are protected sufficiently.

### **1.7 Definition of Term**

**Activities** refers to the time spend by visitors during their stay in Erawan National Park.

**Category of Visitor** refers to whether the respondent categorizes themselves as a general park visitor or an ecotourist.

**Demographic Information** refers to the gender, age, and nationality of survey respondents.

**Motivation** in this study refers to the intrinsic and extrinsic reasons that tourists decide to visit Erawan National Park.

**Nature** refers to naturally occurring features, both living and non-living.

**National Park** refers to an area of land which is owned and protected by the government, and maintained for conservation and public recreation.

**Overall Experience** refers to the visitors' general impression of Erawan National Park, and whether or not they enjoyed their stay.

**Problems Encountered** refers to annoyances encountered and negative impacts observed by tourists during their stay in Erawan National Park.

**Purpose of Visit** refers to the general reason that the respondents are visiting the national park, whether for holiday, adventure, education, or other purposes.

**Size of Group** refers to whether or not the respondent is visiting alone, and who he or she is visiting with.

**Support for Management Action** in this study refers to the amount of support or opposition shown by the respondents for possible management action to be undertaken by the park staff.

**Sustainable Development** refers to the development of infrastructure and resources, with the ultimate goal of maintaining and preserving resources for future generations.

**Sustainable Tourism** refers to tourism that is designed to make a minimal impact on the environment while still meeting the needs of a growing tourist industry.

**The Environment** refers to the surroundings of humanity, including all living and non-living things in a given area.

**Visitor Characteristics** refers to the basic demographic information of the visitors, as well as the characteristics of the visit itself, including the length of stay, the size of the group, and the purpose of stay.

**Wildlife** refers to the flora and fauna of a region.

## CHAPTER 2

### REVIEW OF LITERATURE AND RELATED STUDIES

#### 2.1 National Park Management in Thailand

Thailand classifies eight types of protected areas: national parks, forest parks, wildlife sanctuaries, non-hunting areas, natural forest reserves, botanical gardens, arboretums, and biosphere reserves. Of these, the national parks, forest parks, wildlife sanctuaries, and natural forest reserves are protected under the protected area system (Chettamart, 2003). At present, about 13 percent of Thailand's land and sea area is protected (Ross, 2003). These areas are defined as follows.

**National Park** – An area protected under the National Park Act of 1961. Defined as an “area of land, the natural feature of which is of interest, to be maintained with a view to preserving it for the benefit of public education and amenity” (Section 6, National Park Act of 1961), a national park is owned by the government and managed by the Royal Forestry Department (RFD) in order to preserve the local ecosystems, and provide public access, for recreation and education (Chettamart, 2003). Thailand's National Parks are categorized by the IUCN as category II strictly protected areas (Sims, 2009). In addition to ecological conservation, Thai national parks also aim to preserve natural beauty (Piyathip, 1997). As of 2003, there were 79 national parks in Thailand, of which 18 were marine national parks (Ross, 2003).

**Forest Park** – These areas predate the national parks, and are officially known as national reserved forest areas. Khao Yai National Park, the first of Thailand's national parks, was a forest park prior to the establishment of the National Park Act (Piyathip,

1997). In 1964, the National Reserved Forests Act, which has guided the protection and development of forest parts to this day, was passed into law (Chettamart, 2003). Unlike a national park, the primary objective of a forest park is public recreation, and conservation is relegated to a secondary objective. Forest Parks are considered a category III protected area by the IUCN (Chettamart, 2003). The NRFA places the government in ownership of all forest parks, and prohibits all ownership and exploitation of land within the national forest, except logging carried out with the permission of the government (Chapter II, National Reserved Forest Act of 1964).

**Wildlife Sanctuary** – An area protected under the Wild Animals Reservation and Protection Act, or WARPA, of 1992 (Chettamart, 2003). The objective of a wildlife sanctuary is the protection of local wildlife habitats. Public recreation is not a high priority, and public access is often prohibited (Chettamart, 2003). The WARPA designates the creation and management of wildlife sanctuaries as the responsibility of the National Committee on Wild Animal Reservation (Wild Animals Reservation and Protection Act of 1992, Chapter 2). Thailand's Wildlife Sanctuaries, are, like the national parks, categorized as strictly protected areas by the IUCN, falling into category IA (Sims, 2009). As of 2003, there were 89 wildlife sanctuaries in Thailand (Ross, 2003).

**Non-hunting Area** – Like Wildlife Sanctuaries, Non-hunting areas are protected under WARPA (Chettamart, 2003). They are officially referred to as wild animal reserved areas (Chapter VI, WARPA, 1992). These areas, usually small, have been set aside for the protection of specific species that rely upon the area for habitat. Hunting of the protected species is prohibited within the area. Non-hunting areas are considered a category VI protected area by the IUCN (Chettamart, 2003).



### **2.1.1 Legislation**

The regulations of the National Park Act of 1961 are as follows (Piyathip, 1997):

- The land of a national park is a public area consisting of important natural resources, to be set aside for conservation, research, education and recreation.
- Any activities which present a danger to the natural features and ecosystem of the park area are prohibited. For example, animal hunting, removing flowers and plants, open fires, and logging are strictly prohibited within the park.

The National Park Act of 1961 established a National Park Committee, consisting of the leaders of the Ministry of Agriculture and the Royal Forest Department, along with representatives from the Department of Local Administration and the Department of Lands. This committee is tasked with the designation and maintenance of National Parks (Chapter II, National Park Act of 1961).

### **2.1.2 Management Objectives for National Parks**

The main management objective of a national park is the conservation of resources within the park area. Resources consist of natural resources, cultural resources and historical resource, and these should be managed and made available for research and education (Piyathip, 1997). The Tourism Authority of Thailand has pursued a policy of increasing visitor numbers to both national parks and protected forests, but, as of 2003, this policy lacked a solid management plan (Ross, 2003).

### **2.1.3 Administration**

The National Park Act of 1961 places the government's National Park Committee in charge of the determination and maintenance of national parks (Section 15, National Park Act of 1961). The agency responsible for the administration of the national parks is the Royal Forestry Department. The RFD usually divides the responsibilities for protecting the park into four areas: resource protection, public relations, development projects, and general administration (Piyathip, 1997).

### **2.1.4 Revenue**

The revenue of a national park comes from entrance fees, fines, accommodation, and camping fees (Piyathip, 1997). Services within the national park normally require a usage fee, and the proceeds from this fee are returned to the Department of National Parks in Bangkok, and can be returned to the park for the maintenance and development of facilities and services (Chettamart, 2003). This revenue is used to develop and maintain national parks throughout Thailand. As of 1997, the revenue of the national park system was about US\$ 1.5 million per year (Piyathip, 1997).

### **2.1.5 Services**

The DNP is responsible for the development of visitor facilities, for which it hires contractors (Chettamart, 2003). The RFD maintains food services, accommodation, souvenir shops and guide services in the national parks. The RFD normally does not allow private investors to administer businesses within the park, although private investors are sometimes contracted to manage services which the RFD administers. However, some national parks, such as Phu Kra Dueng National Park, allow private

businesses to serve tourists. In order to provide job opportunities to the local community, the RFD usually hires local people to work for the shops and services of the park. If local people wish to set up their own business within the park, they must pay rent for shop space (Piyathip, 1997).

## **2.2 Management Strategy for National Parks in Thailand**

In the past, the strategy for managing national parks in Thailand was based on a traditional model of forest management. Park rangers were trained as law enforcement officers, and trained to use and carry firearms. Although this was effective at reducing illegal activities within some national parks, it led to conflict between rangers and the local communities, and as such has been changed in recent years (Piyathip, 1997).

Presently, park management focuses more on collaboration between the park staff and local people. Law enforcement is still a priority, but it is not considered to be sufficient in and of itself. There is a strong emphasis on public involvement, and attracting visitors to assist in the protection of the park has become a higher priority. The ultimate goal is to create an understanding among the public that the national parks of Thailand are one of the nation's most important features, and are worthy of protection (Piyathip, 1997).

Chettamart (2003) identifies the management strategy of Thai national parks as follows:

- Most national parks use the ecotourism concept and regulations to develop and operate. These parks have followed the rules and regulations of the Department of National Parks and their development and management policies tend to reflect the positions of the TAT and the Government.

- Most national parks operate under a specific management plan. These parks are normally divided into management zones, each of which is developed to serve a specific purpose, such as environmental protection, or facilities for visitors.
- Included within the management plan is the number of visitors to the park. The total number of visitors should at no time exceed the park's carrying capacity. The number of visitors to the national park should not have a negative effect on the ecosystem.
- Facilities for visitors to the national park are funded by the Department of National Parks. These include facilities for accommodation, recreation, equipment rental, and food.
- All visitors to the national park must pay an entrance fee. This fee is used by the Department of National Parks for the development and management of the national park system. The central office of the Department of National Parks in Bangkok must approve any spending by the management of each individual national park.
- The Department of National Parks places a strong emphasis on the benefit of national parks to local communities. Local people are allowed to operate businesses and offer services in or near the national park. Community-based tourism has been promoted extensively, and has been taken up by both domestic and international tourists. Communities in some areas have even been given a voice in the planning and management of the national parks (Emphandhu, 2003).

- Most national parks in Thailand provide their own brochure, data, and booklets, to attract tourists to their ecotourism programs. The Tourism Authority of Thailand also promotes ecotourism on behalf of the national parks.

### **2.3 Categorizing Tourists to Thai National Parks**

Tourists typologies generally fall into two categories: interactional and cognitive-normative (Hvenegaard, 2002). Interactional tourist typologies examine the types of tourists based on the how the tourists interact with the tourist destination. For example, an interactional tourist typology might examine the intended destination, the length of the trip, activities engaged in upon the trip, personal interests, and personal opinions. Cognitive-normative typologies, by contrast, are based on the motivation for traveling. These typologies will generally examine the factors which attract tourists, and the idea that brought the tourist to the national park (Hvenegaard, 2002).

By using a tourist typology to conduct a survey, one can identify general types of tourists that visit an area. A simple interactional typology from 1993 inquired about the primary activities of visitors to Doi Inthanon National Park. Out of the nearly one million visitors, 723 were categorized as birders, 7967 as trekkers, and the rest were categorized as general visitors (Hvenegaard, 2002). This typology was researcher-based, as the respondents were defined by the researcher into a category before taking the survey, based on the activity they were engaged in. The respondents were then questioned about the length of their stay, and the number of places visited within the park (Hvenegaard, 2002). The survey revealed that those categorized as birders were far more



likely to spend more than one day in the park, walk on the nature trails, and take time to view wildlife (Hvenegaard, 2002).

Another typology, conducted at the same time, was respondent-based, and combined interactional and cognitive-normative elements. Like the typology discussed above, the respondents were placed by the researchers into one of three categories before taking the survey. During the survey, however, the respondents were told to choose one of six categories with which to define themselves. The results showed that 63.8% of those that the researchers categorized as birders also defined themselves as birders, whereas 22.3% considered themselves ecotourists. 68.1% of those that the researchers categorized as general visitors considered themselves general tourists, with ecotourist and traveler taking just over 10% each. The most interesting result was the trekkers, of whom only 11.5% defined themselves as trekkers, with the majority, at 54.2%, categorizing themselves as travelers (Hvenegaard, 2002).

## 2.4 Tourist Activities in Thai National Parks

The Department of National Parks website lists the following popular activities (DNP, 2004).

- **Bird Watching** is popular in national parks throughout Thailand, due to the kingdom's great diversity of bird life. About 10% of all bird species have been recorded in Thailand (Ross, 2003).
- **Butterfly Watching** is an activity that has gained lots of popularity in Thailand in recent years. Butterflies are found throughout Thailand, but

butterfly watching is most popular in certain national parks, including Erawan National Park (DNP, 2004).

- **Cave Touring** is a challenging activity that's popular throughout Thailand's national parks. Because of the mountainous karst topography of much of Thailand, there are caves scattered throughout the country.
- **Diving** is popular in the marine national parks of the south, in both the Gulf of Thailand and the Andaman Sea.
- **Flower Watching** is mainly popular in the montane forests of the north, such as Doi Inthanon National Park. Due to Thailand's warm weather, flower watching is a year-round activity.
- **Photography** is very popular in Thai national parks due to the natural beauty of the protected areas.
- **Rafting** is an exhilarating activity that is popular in Thailand's numerous rivers.
- **Stargazing** is popular with people who stay in national parks overnight. It is very easy, and requires no tools. National parks are ideal places for stargazing due to the lack of artificial light.

These are not, of course, the only activities that tourists engage in when they visit the national parks of Thailand. Trekking, to visit hill tribes, view wildlife, or experience nature, is very popular throughout the country, especially in the Northern provinces.

#### **2.4.1 Tourist Activities in Erawan National Park**

The primary attraction of Erawan National Park is the Erawan Waterfall. Visitors can swim in the waterfall, climb to the top, or take photos. In addition, getting to the waterfall involves a walk through the jungle on a nature trail. In addition to the Erawan Waterfall, the Pha Lan Waterfall is a less-visited attraction, that comes into its own during the rainy season. Erawan National Park is a very mountainous park, and features numerous caves, making caving a potentially popular activity. There is also great opportunity for wildlife viewing, as the park features a diverse assortment of wildlife, including several endangered mammals (DNP, 2004).

#### **2.5 Tourist Motivations for Visiting Thai National Parks**

Thailand has a reputation as a welcoming country endowed with beautiful and diverse scenery, a fascinating culture, and friendly people. It is a very geologically diverse country, stretching farther from the north to the south than from the west to the east. As such, it is a very popular country with tourists (Ross, 2003). Thailand's national parks attract millions of tourists every year, the majority of whom are Thai (Pipithvanichtham, 1997). A survey conducted at Doi Inthanon National Park in 1993 used a motivation-based typology to classify the tourists. 80.9 percent of the tourists categorized as birders listed "birds and wildlife" as their primary motivation for visiting the park. 34.3 percent of those categorized as trekkers listed "culture and hilltribes" as their motivation, with the second most popular choice being "scenery and waterfalls", at 18.1 percent.

For general visitors, "scenery and waterfalls" was the most popular motivation, with 33.5 percent of the respondents listing it as their primary motivation. 24 percent of

the general visitors listed “highest point in Thailand” as their main motivation for visiting the park. Few of the motivations appealed to all three groups. Most of them were popular with one group and, for the other two groups, took less than 10 percent. The exceptions were “scenery and waterfalls”, which was popular with both trekkers and general visitors, and “natural environment”, which appealed to about 10 percent of all three groups (Hvenegaard, 2003).

The largest draw of Erawan National Park is, of course, the Erawan waterfall, and the waterfall is likely to be the primary motivation of most tourists who visit. Other potential motivations include “escape from city life”, due to Erawan’s proximity to Bangkok, “wildlife”, due to the endangered species sheltered within the park, and more general motivations, such as “nature walk”, “rest”, and “adventure”. All of these describe not the activity that the tourist participates in, but the reason that they made the decision to go to Erawan National Park in the first place.

## **2.6 Problems Faced by Tourists to National Parks**

Visitors to national parks face a number of problems. In Thailand, a perennial problem is a lack of sufficient staff to deal with the load. In the past two decades, tourist numbers have increased steadily, yet the government has made little effort to hire and train new staff, and at points has even frozen the recruiting of park staff (Pipithvanichtham, 1997). Environmental degradation is also an issue. A survey conducted at Bako National Park, Malaysia, in 2000, found that a majority of visitors were concerned with environmental impacts that they had observed in the park, as well as potential concerns that could arise in the future (Chin, Moore, Wallington, and Dowling, 2000). Due to the priority given to

conservation, visitor facilities will not always be up to standard. A 1996 survey conducted at Kibale National Park in Uganda revealed that although visitors were overall satisfied with the park, they were dissatisfied with the facilities. The report attributed this to the relative inexperience of the park staff, and the fact that the park prioritized conservation over recreation (Obua and Harding, 1996).

## 2.7 Empirical Studies

Five empirical studies were used in this study. These are analyzed in table 2.1.

**Table 2.1: Empirical Studies**

<b>Authors</b>	<b>Title</b>	<b>Key Findings</b>
Chin, Moore, Wallington, and Dowling (2000)	Ecotourism in Bako National Park, Borneo: Visitors perspectives on environmental impacts and their management.	Tourists to Bako National Park were concerned about visible tourism impacts as well as potential future impacts.
Niefer, da Silva, and Amend (2002)	Analysis of the visitors of Superagui National Park, Brazil.	A majority of visitors to Superagui National Park could be categorized as ecotourists.
Obua and Harding (1996)	Visitor characteristics and attitudes towards Kibale National Park, Uganda.	Almost all of the visitors to Kibale National Park were foreigners, and visited to watch wildlife
Obua and Harding (1997)	Environmental impact of ecotourism in Kibale National Park, Uganda.	Despite a low number of tourists, Kibale National Park suffered from significant environmental damage in the visitor areas.
Hvenegaard and Dearden (1998)	Ecotourism vs. tourism in a Thai National Park.	Ecotourists are far more concerned for the environment than regular tourists, although they rarely make donations in Thailand.



**Cynthia L.M. Chin, Susan A. Moore, Tabatha J. Wallington and Ross K. Dowling (2000): Ecotourism in Bako National Park, Borneo: Visitors perspectives on environmental impacts and their management.** This study was conducted to gain a greater understanding of the effects of ecotourism in Malaysia, by surveying tourists, and eliciting their observations about negative impacts. For the study area, the researchers chose one of Malaysia's most popular national parks, and conducted the survey in the most frequented area of the park. The researchers distributed 284 questionnaires, receiving a 74% response rate. In addition, the Park staff distributed another 46 questionnaires, receiving a 56% response rate. In total, 236 questionnaires were returned. The survey covered the demographics of the respondents, the activities they participated in, and the environmental impacts that they had observed while visiting the national park, as well as whether they thought those environmental impacts could potentially develop in the future. In addition, respondents were asked to consider the severity of the impacts, and rate their support for potential management strategies. The study found that the main concern of the respondents were visual impacts, including litter, erosion, and damage to the vegetation. Concern for the future of the park was also made apparent, through the amount of tourists who listed potential impacts as a greater concern than current impacts. New management strategies were strongly supported, with a large majority of the respondents supporting greater education for visitors.

Bako National Park holds a number of similarities to Erawan National Park. It is one of Malaysia's most popular and easily accessible parks, in the same way that Erawan National Parks is one of Thailand's most popular. Both parks are located near major population centers, Bako being located near Kuching, and Erawan near Bangkok.

Moreover, both parks feature a single major attraction that draws tourists to the park. In the case of Erawan National Park, this is the Erawan waterfalls. In the case of Bako National Park, it is the endangered proboscis monkey.

There are a number of differences as well. Bako National Park has better infrastructure for independent travelers, whereas Erawan National Park is more popular as part of a package tour. As a result, visitors to Bako will be more likely to spend a longer time in the park than visitors to Erawan, and more likely to notice negative environmental impacts. Kuching is also a much smaller population center than Bangkok, and as a result, many of the visitors to Bako National Park are likely to have travelled a longer distance to visit the park than the visitors to Erawan. This will make them more receptive to alternative activities and more likely to stay for a longer period of time.

**Inge A. Niefer, Joao Carlos G.L. da Silva, and M. Amend (2002): Analysis of the visitors of Superagui National Park, Brazil.** This paper discusses a survey which was carried out in Superagui National Park, a little-visited island park in the south of Brazil. At the time of the survey, the park was underdeveloped, and had very little tourist infrastructure, the only means of access being by private boat. The researchers distributed a 37-question survey in Barra de Superagui, the park's largest touristic settlement. In addition, personal interviews were conducted of 94 respondents. The survey collected the demographic information of the respondents, as well as the characteristics of their trip, and their satisfaction with the experience. The researchers used a generally accepted definition of ecotourism, and, with the results of the survey, determined that the majority of visitors could be defined as ecotourists, due to their

concern for the environment, concern for the welfare of the local culture, and desire to engage in activities related to nature.

This study shows an example of a national park that has primarily attracted ecotourists, with little to no mass tourism. The key difference between Superagui National Park and Erawan National Park is that Erawan is a famous destination that has been popular for many years, whereas Superagui is relatively unknown. Aside from that, there are a surprising number of similarities. Both Superagui National Park and Erawan National Park are located to the largest cities of their country, Superagui being near Sao Paulo and Erawan being near Bangkok. In addition, although Erawan National Park is more visited than Superagui National Park, the vast majority of the park remains undeveloped, with the famous waterfall being the star attraction.

**Joseph Obua and D.M. Harding (1996): Visitor characteristics and attitudes towards Kibale National Park, Uganda.** Kibale National Park is located in the east of Uganda, and covers one of the world's most diverse forests. This study was conducted to determine the characteristics of visitors in Kibale National Park. The survey was divided into three parts. The first part was concerned with demographics and travel characteristics, the second with activities and attitudes towards the park and the facilities and management of the park, and the third with the duration of the visit and the facilities used during the visit. A pilot survey was conducted prior to the actual survey, to test the suitability of the questions and the sampling procedure. Questionnaires were handed to tourists returning from the nature trails surrounding the camping area, and every second person was surveyed. The researchers distributed 213 surveys, and received 200 complete responses. The study found that the vast majority of those who visit Kibale

National Park are from foreign countries, and that very few Ugandans visit. The primary activities engaged in by visitors are wildlife viewing, camping, and general relaxation.

There are a large number of differences between the situations in Kibale National Park and Erawan National Park, but a number of similarities as well. The primary difference is cultural. Thais travel more often than Ugandans, and as a result, the national parks of Thailand, Erawan included, are far more frequented by domestic tourists than Kibale National Park. Also, Kibale is very remote, whereas Erawan is closely located to Bangkok. However, the situation of the foreign tourists visiting both Kibale National Park and Erawan National Park is roughly the same, and both parks have a star attraction, with Kibale National Park's primary attraction being chimpanzees.

**Joseph Obua and D.M. Harding (1997): Environmental impact of ecotourism in Kibale National Park, Uganda.** This project attempted to measure the environmental impact of tourism in Kibale National Park. The study focused on campsites and walking trails, using nine parameters to measure the environmental impact on the campsites, and four parameters to measure the impact on the walking trails. The parameters for the campsites included vegetation loss, mineral soil increase, tree damage, root exposure, cleanliness, social trails, camp area and barren core area. The parameters for the walking trails included erosion, root exposure, vegetation, and slope. The study found that despite a relatively low number of visitors per year, Kibale National Park was suffering from significant environmental damage in the areas frequented by the visitors. The impact in the dry season was found to be greater than that in the wet season. The study attributed the environmental damage to the rapid increase in tourists that had occurred the year

before it was conducted. The study also warned of the park management's lack of ability to cope with the increasing tourist numbers and environmental degradation.

From the perspective of environmental impact, Kibale National Park holds a number of similarities with Erawan National Park. Both are located in tropical regions that see a large amount of rain each year, and both see two seasons. Both harbor a number of endangered species. However, in Kibale National Park, these species, and the chimpanzees in particular, form the park's star attraction, whereas in Erawan National Park, they play a secondary role to the waterfall. Although the environmental degradation, such as soil erosion and root exposure, is likely to be similar, the popularity of Kibale National Park's wildlife means that the animals there are likely to be far more accustomed to human presence, an issue which is not likely to be as severe in Erawan National Park. Another issue, which is likely to effect Erawan National Park worse than Kibale National Park, is noise pollution, due to Erawan National Park's large crowds.

**Glen T. Hvenegaard and Philip Dearden (1998): Ecotourism vs. tourism in a Thai National Park.** This study sought to compare characteristics of ecotourists with those of regular tourists, through a survey distributed at Doi Inthanon National Park in Thailand. The study admitted the lack of a firm definition of ecotourism, and defined ecotourists based on their activities, the sites they chose to visit, and their motivation for visiting the park. The survey divided respondents into three categories. Birders were defined as visitors who had visited the park mainly for the purpose of bird watching. Trekkers were defined as those participating in an organized trek within the park. Other visitors who did not fall into either category were classified as general tourists. Questionnaires were distributed to birders upon arrival at the Doi Inthanon Bird Center, and interviews were



conducted with birders and general visitors at heavily frequented sites throughout the park. Interviews were conducted with trekkers upon arrival in Chiang Mai after visiting the park. The questionnaires and interviews covered traveler demographics, activities, budget, sites visited, and motivation for visiting the park, as well as a history of donations to conservation. The researchers used four separate typologies to categorize the respondents. The respondents were placed by the researchers into the three categories, in a researcher-based typology, and asked to categorize themselves in a respondent-based typology. The remaining typologies were activity and motivation-based, and the respondents were questioned about their motivation for visiting and the activities they participated in. The study received 857 respondents, of whom 137 were birders, 211 were trekkers, and 509 were general visitors. The study found that ecotourists held a much higher interest in conservation, and often donated to causes in their home country, while donating relatively little money to causes in Thailand. Ecotourists were found to be older, as a whole, than regular tourists. Interest in an alternative ecotourism activity was found to be high.

Doi Inthanon National Park holds a number of very relevant similarities to Erawan National Park. Both parks are among the most popular in Thailand. Both are located close to a major population center, with Doi Inthanon National Park being located near Chiang Mai. Both feature a star attraction that brings in the majority of the tourists, with Doi Inthanon being popular as the highest point in Thailand. Both parks are popular with Thai and foreign tourists, and due to the similar characteristics, are likely to have similar proportions of Thai to foreign tourists. This study is also very relevant to any

ecotourism research in Thailand, as it provides a means of identifying an ecotourist as opposed to a regular tourist.

There are a number of relevant differences between Erawan National Park and Doi Inthanon National Park as well. Erawan National Park is located closer to a far larger population center than Doi Inthanon. This means that the crowds at Doi Inthanon are likely to have travelled a much longer distance to visit than the crowds at Erawan, and will be more receptive to alternative activities and a longer stay. By contrast, visitors to Erawan National Park visit as part of a package tour of Kanchanaburi Province, and will likely only be interested in the waterfall. Doi Inthanon attracts a diverse crowd of sightseers, ecotourists and birdwatchers. It is unlikely that Erawan National Park attracts a group as diverse as that, because it is mainly popular for a single attraction, the waterfall, and the rest of the park is underdeveloped and largely unknown.

## CHAPTER 3

### RESEARCH FRAMEWORK

#### 3.1 Theoretical Framework

The purpose of a theoretical framework is to identify the problem, and explain why the research presents a viable solution to the problem (Zeidler, 2010). Research conducted at Bako National Park in Malaysia, which operates on a loosely regulated mass tourism model, revealed popular concern amongst visitors regarding environmental impacts (Chin, Moore, Wallington, and Dowling, 2000). According to Ross (2003), mass tourism creates environmental issues, as the primary concern is profit, as opposed to conservation and benefit to the local communities. In addition, Hvenegaard and Dearden (1993) found that the resident population of Doi Inthanon National Park, are dependent on the resources of the park, and regularly make use of them illegally. Bearing this in mind, it becomes evident that simply giving land protected status is not enough to ensure the conservation of its resources.

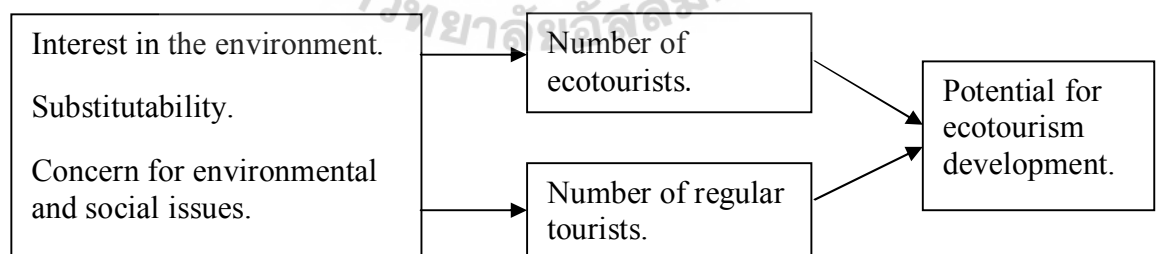
A national park's potential for ecotourism development can be seen as a derivative of the appeal it holds to those categorized as ecotourists. As such, a framework is needed for differentiating between ecotourists and regular tourists.

Hvenegaard and Dearden (1993) developed such a framework with a study conducted at Doi Inthanon National Park. Ecotourists, they found, were more concerned with conservation than other tourist types, and often made donations to environmental charities in their home country, although donations within Thailand were rare. They found that ecotourists were generally more educated than other types, and that they were

more willing to substitute their planned activity with an alternative, ecotourism-related activity. Substitutability, in turn, implies general interest in the environment of the national park, as opposed to visiting for a single purpose. Another study, conducted at a little-visited national park in Brazil, showed a very harmonious relationship between the tourists and the environment, prior to the arrival of mass tourism (Neifer, da Silva and Amend, 2002).

A theoretical framework therefore emerges (Figure 3.1) for assessing the ecotourism potential in a national park. The potential for ecotourism development is derivative the number of tourists who show a higher degree of substitutability, and who express an interest in ecotourism activities. This includes regular tourists who do not as a whole, fall into the category of ecotourists themselves. The framework separates ecotourists from regular tourists based on high levels of interest in the environment, willingness to substitute their chosen activities, and concern for environmental and social issues.

**Figure 3.1 Theoretical framework for ecotourism development potential.**



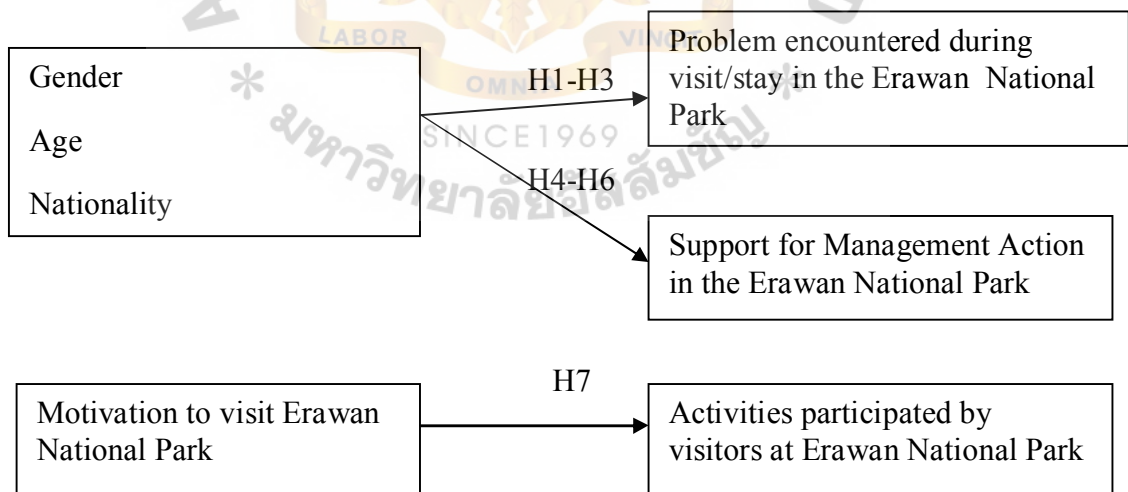
Source: Hvenegaard (2002).

### 3.2 Conceptual Framework

Understanding visitor characteristics is a principal aspect of sustainable tourism. Planning of new development, monitoring trends and predicting recreation demands all require adequate information on visitors. The provision of good quality facilities demanded by visitors will depend to a large extent on sound management and will require knowledge of visitor's expectations. Visitor attitudes to potential management actions can assist in predicting the consequences of specific actions on the visitors experience.

Therefore, in this the independent variables are tourists and demographics motivations whereas the dependent variables cover activities, motivation for visiting, problems encountered, recommended management actions, and overall attitude towards the respondents' experience in the park. The conceptual framework is illustrated in figure 3.2.

**Figure 3.2 Conceptual framework for the study.**





### 3.2.1 Independent Variables

The independent variables consist of the demographics of the visitors, including gender, age, and nationality of the visitors, as well as the motivation for visiting Erawan National Park.

### 3.2.2 Dependent Variables

The dependent variables are as follows.

**Activities participated in by visitors:** This variable covers the activities that each visitor chose to participate in while visiting the national park.

**Problems encountered during stay:** This covers inconveniences and social or environmental concerns encountered by respondents during their stay in the park.

**Support for management actions:** Based on the overall visitor experience, the respondents select management actions that they recommend for the future of the national park.

### 3.3 Research Hypotheses

The objective of this study is to assess, based on tourist characteristics, the potential for ecotourism development within Erawan National Park. Therefore, the following hypotheses are presented.

Ho1: The differences in tourists's problem encountered during visit/stay in the Erawan National Park with regard to gender is not significant.

- Ha1: The differences in tourists's problem encountered during visit/stay in the Erawan National Park with regard to gender is significant.
- Ho2: The differences in tourists's problem encountered during visit/stay in the Erawan National Park with regard to age is not significant.
- Ha2: The differences in tourists's problem encountered during visit/stay in the Erawan National Park with regard to age is significant.
- Ho3: The differences in tourists's problem encountered during visit/stay in the Erawan National Park with regard to nationality is not significant.
- Ha3: The differences in tourists's problem encountered during visit/stay in the Erawan National Park with regard to nationality is significant.
- Ho4: The differences in tourists's support for management action in the Erawan National Park with regard to gender is not significant.
- Ha4: The differences in tourists's support for management action in the Erawan National Park with regard to gender is significant.
- Ho5: The differences in tourists's support for management action in the Erawan National Park with regard to age is not significant.
- Ha5: The differences in tourists's support for management action in the Erawan National Park with regard to age is significant.
- Ho6: The differences in tourists's support for management action in the Erawan National Park with regard to nationality is not significant.

Ha6: The differences in tourists's support for management action in the Erawan National Park with regard to nationality is significant.

Ho7: Tourists' motivation to visit is not related to activities participated by visitors at Erawan National Park.

Ha7: Tourists' motivation to visit is related to activities participated by visitors at Erawan National Park.

### 3.4 Operationalization of the Independent and Dependent Variables

The dependent and independent variables are operationalized discuss in table 3.4

Component which be used to receive data are lists in operational components. Scale of measurement is used to classify each variable.

**Table 3.4 Operationalization of Dependent Variables**

<b>Dependent Variables</b>	<b>Conceptual Definition</b>	<b>Operational Components</b>	<b>Level of Measurement</b>	<b>Question No.</b>
Activities participated in while visiting Erawan National Park.	The activities that appeal to the respondent.	<ul style="list-style-type: none"> <li>- Sightseeing</li> <li>- Photography</li> <li>- Swimming in the waterfall</li> <li>- Learning about nature</li> <li>- Bird and butterfly watching</li> <li>- Nature walking</li> <li>- Camping</li> <li>- Landscape observation</li> <li>- Biking</li> </ul>	Interval Scale	Part IV No. 19-27

Continued...

Dependent Variables	Conceptual Definition	Operational Components	Level of Measurement	Question No.
Problems encountered during stay in Erawan National Park	Annoyances or concerns encountered by the respondents.	<ul style="list-style-type: none"> <li>- Lack of enforcement of park regulations</li> <li>- Lack of staff</li> <li>- Litter cans inadequate/absent</li> <li>- Missing or inadequate information</li> <li>- Missing signs</li> <li>- Public restroom absent</li> <li>- Poor access to park</li> <li>- Overcrowding on weekends and holidays</li> <li>- Accommodation without comfort</li> <li>- Safety and security</li> <li>- Conflict with other recreation activities</li> <li>- Inadequate car parking</li> <li>- Entrance fee/camping fee</li> </ul>	Interval Scale	Part V No. 28-40

Continued...

Dependent Variables	Conceptual Definition	Operational Components	Level of Measurement	Question No.
Recommended Management Action	Action recommended by the respondents for future management in Erawan National Park	<ul style="list-style-type: none"> <li>- Educate visitors more about conservation</li> <li>- Provide more maps and sign at different points for directions</li> <li>- Limit overall number of visitors</li> <li>- Limit number of people per group</li> <li>- Provide more staffs</li> <li>- Limit length of stay</li> <li>- Provide souvenir products</li> <li>- Provide brochures, maps</li> <li>- Allow unguided walk</li> <li>- No additional infrastructure , keep the park as it is</li> <li>- Provide more amenities for comfortable stay</li> <li>- Reduce entrance fee</li> <li>- Provide special package</li> <li>- Lot of car parking</li> </ul>	Interval Scale	Part VI No. 42-55



**Table 3.5 Operationalization of Independent Variables**

<b>Independent Variables</b>	<b>Conceptual Definition</b>	<b>Operational Components</b>	<b>Level of Measurement</b>	<b>Question No.</b>
Gender	Gender of the respondent	<ul style="list-style-type: none"> <li>- Male</li> <li>- Female</li> </ul>	Nominal Scale	Part I No. 1
Age	Age of the respondent	<ul style="list-style-type: none"> <li>- Under 18</li> <li>- 18-34</li> <li>- 35-54</li> <li>- 55 or older</li> </ul>	Ordinal Scale	Part I No. 2
Nationality	Nationality of the respondent	<ul style="list-style-type: none"> <li>- Thai</li> <li>- Foreigner</li> </ul>	Nominal Scale	Part I No. 3
Motivation for visiting Erawan National Park	The reason that tourists decided to visit Erawan National Park	<ul style="list-style-type: none"> <li>- Waterfall</li> <li>- Forest</li> <li>- Escape from the city life</li> <li>- Camping</li> <li>- Adventure</li> <li>- Rest</li> <li>- Landscape</li> <li>- Nature Walk</li> <li>- Environmental Problem</li> <li>- Support local communities</li> </ul>	Interval Scale	Part III No. 9-18

## CHAPTER 4

### RESEARCH METHODOLOGY

#### 4.1 Methods of Research Used

This study made use of descriptive research to examine the demographics of visitors to Erawan National Park. A visitor survey provided means of getting feedback from visitors themselves. The idea was to determine who was visiting Erawan National Park, what they were doing, and what had attracted them to visit. Data was presented in tables, to allow quick analysis.

#### 4.2 Respondents and Sampling Procedures

##### 4.2.1 Target Population

The respondents of the survey were visitors to Erawan National Park in western Thailand. Both Thai and foreign tourists were surveyed in Erawan National Park in the month of August – September.

##### 4.2.2 Sample Size

Based on tourists statistics of TAT, out of the total percentage of tourists visiting attractions of Kanchanaburi Province, 21.51% (table 4.1) came to Erawan National Park in 2007. Considering that the total number of visitors who came to Kanchanaburi were 4,791,756 (TAT, 2007), there were around 1 million people who visited Erawan National Park in 2007.

**Table 4.1 Tourists statistics**

Location	Percent of tourists		
	Thai	Foreigner	Total
Bridge on the River Kwai	48.40	62.68	49.41
Erawan National Park	22.33	10.77	21.51
Sai Yok Yai Waterfall	22.92	0.00	21.30
Don-Ruk war cemetery	16.19	52.10	18.73
Middot; Hindard hot spring	9.12	0.00	8.48
Tham Kra Sae	8.00	0.00	7.43
Sai Yok Noi Waterfall	7.19	1.44	6.79
Pha Tad Waterfall	7.05	0.00	6.55
Srinakarin Dam	6.74	0.55	6.31
Temple of Tiger Cave	4.26	5.58	4.35
Temple of Kao Pun Cave	3.24	1.20	3.09
Prasat Muang historical Park	2.26	0.00	2.10

Sources: Tourism Authority of Thailand, 2007

According to Anderson's (1996) table and Sample Size (Table 4.2), 384 questionnaires were distributed to respondents in Erawan National Park.

**Table 4.2: Theoretical Sample Sizes for Different Sizes of Population and a 95 percent level of certainty**

Population (Sampling Frame)	Required Sample for Tolerable Error			
	5%	4%	3%	2%
100	79	85	91	96
500	217	272	340	413
1,000	277	375	516	705
5,000	356	535	897	1,622
50,000	381	593	1,044	2,290
100,000	382	596	1,055	2,344
1,000,000	384	599	1,065	2,344
25,000,000	384	600	1,067	2,400

Source: Fundamental of Education Research: Anderson, 1996

### **4.2.3 Sampling Procedures**

The sampling frame was limited to Park visitors approached while in the Park. Visitors were asked if they wanted to participate in the study, and if they agreed, were given a brief description of the study. 384 questionnaires were distributed to visitors, both Thai and foreign, at the waterfall, the walkway, the souvenir shops, and the exit to the park, all places which most visitors pass at some stage of the visit.

The survey aimed to determine the characteristics of tourists visiting Erawan National Park, so all of the respondents were tourists. Respondents were chosen using convenience sampling. The respondents were given small chocolate and sweet as appreciation for filling in the questionnaire. These subsequently encourage responding.

### **4.3 Research Instruments/Questionnaire**

The questionnaire was written both in English and Thai language. The questionnaire featured seven sections, both open-ended and closed-ended, each of which covered a different set of information about the respondents. The first two sections were multiple-choice, while sections three through six used a Likert scale, with each statement being rated from 1 to 5. Section seven featured one multiple choice question, and several open-ended questions.

#### **Part I: Demographic Information**

The first part of the questionnaire featured three multiple-choice questions. These covered basic demographic information, including gender, age, and nationality

## **Part II: Visitors trip characteristics**

The second part of the questionnaire contained five multiple-choice questions. These included the number of visits prior to and including the visit during which the respondent completed the survey, the length of the respondent's current stay in the park, the purpose of each respondent's visit, the size of the group that the respondent was travelling with, and the category of tourist that the respondents believed they were.

## **Part III: Motivation for visiting Erawan National Park**

The third part of the questionnaire featured ten questions which aimed to determine the respondent's motivation for visiting Erawan National Park. These questions made use of a 5-point Likert Scale that asked the respondents to rate the importance of each potential motivation in encouraging them to leave their home and come visit Erawan National Park, in which 5 was extremely important, 4 was fairly important, 3 was neither important nor unimportant, 2 was not so important, and 1 was not at all important.

## **Part IV: Activities participated in while visiting Erawan National Park**

The fourth part of the questionnaire featured nine questions which aimed to determine the activities which the respondent participated in while visiting Erawan National Park. These questions made use of a 5-point Likert Scale with which the respondents rated the importance of each activity they had participated in, with a rating of 5 representing the most enjoyed activity, 4 representing a fairly enjoyed activity, 3 being an activity which was neither enjoyed nor not enjoyed, 2 being a somewhat not enjoyed activity, and 1 being the least enjoyed activity.



### **Part V: Problems encountered during stay in Erawan National Park**

The fifth part of the questionnaire featured thirteen questions which aimed to determine the problems each respondent had encountered during their stay. These questions made use of a 5-point Likert Scale which the respondents used to rate their level of annoyance with each potential problem, in which 5 indicated no problem, 4 indicated indifference, 3 indicated a slight problem, 2 indicated a problem, and 1 indicated a serious problem.

### **Part VI: Recommended Management Action**

The sixth part of the questionnaire featured 14 questions which aimed to determine the respondents' support for future management action in the park. These questions made use of a 5-point Likert Scale for the respondents to rate their level of support or opposition for each potential management action, in which 5 indicated strong support, 4 indicated support, 3 indicated neither support nor opposition, 2 indicated opposition, and 1 indicated strong opposition.

### **Part VII: Overall experience to the park**

In the seventh part of the questionnaire, respondents were asked to rate their overall experience in the park using a multiple choice question. Then, the respondents used their own words to answer three open-ended questions, regarding any other problems and recommendations.

## 4.4 Collection of data/gathering procedures

### 4.4.1 Primary data

This study used quantitative research for the obtainment of primary data. This was achieved through a self-administered survey. The survey was conducted at Erawan National Park, and consisted of a questionnaire featuring 56 questions. The questionnaire was distributed to 384 randomly selected tourists at the exit to Erawan National Park. The Statistical Package of Social Science (SPSS) was used to assess the data.

### 4.4.2 Secondary Data

The secondary data used in this study was obtained through research in numerous sources, including academic journals, textbooks, tourism publications, and on-line search.

### 4.5 Pre- test

To be reliable, a pre-test of questionnaire was required. The researcher went to Erawan National Park on July 05, 2010. 30 questionnaires were distributed to both domestic and international tourists. After that the researcher used the Statistical Package for Social Sciences (SPSS) program to analyze the data using Cronbach's alpha.

**Table 4.3 The result of Cronbach's Alpha analysis**

Part	Question Number	Cronbach's Alpha
Motivation	9 to 18	.710
Activities	19 to 27	.788
Problems	28 to 40	.849
Recommendation management action	42 to 55	.768

Table 4.3 demonstrates the results of the testing. The Cronbach's Alpha of each part is more than 0.6 which means that the data is reliable.

#### **4.6 Statistical Treatment of Data**

For hypotheses 1, 3, 4 and 6, an independent t-test was used to analyze the data. A t-test is a method of analyzing the difference between two independent variables. In the case of hypotheses 1 and 4, which examined gender, the independent variables were male and female, and in the case of hypotheses 3 and 6, which examined nationality, the independent variables were Thai and foreigner.

For hypotheses 2 and 5, data was analyzed using one-way ANOVA. ANOVA, or analysis of variance, is a method for comparing differences between two or more groups of means. The test makes use of an F-ratio, which compares variance within the groups. A large F-ratio signifies large, or significant, variance, whereas a small F-ratio indicates small, or insignificant, variance. One-way ANOVA makes use of only one independent variable, so tests were conducted for each independent variable.

For hypothesis 7, the data was analyzed using Pearson r. This is a technique for determining the relationship between two variables. In the case of this study, it was used to determine the linear relationship between motivation for visiting and activities participated in by visitors. The hypotheses, along with the tests used, are shown in table 4.4

**Table 4.4 Statistical test of each hypothesis**

<b>Hypotheses</b>	<b>Statement</b>	<b>Statistical test</b>
Hypothesis 1	The differences in tourists' problems during visit/stay in Erawan National Park with regards to gender is significance or not.	t-test
Hypothesis 2	The differences in tourists' problems during visit/stay in Erawan National Park with regards to age is significant or not.	ANOVA
Hypothesis 3	The differences in tourists' problems during visit/stay in Erawan National Park with regards to nationality is significant or not.	t-test
Hypothesis 4	The differences in tourists' support for management action in Erawan National Park with regards to gender is not significant.	t-test
Hypothesis 5	The differences in tourists' support for management action in Erawan National Park with regards to age is significant or not.	ANOVA
Hypothesis 6	The differences in tourists' support for management action in Erawan National Park with regards to nationality is significant or not.	t-test
Hypothesis 7	Tourists' motivation to visit is related to activities participated by visitors to Erawan National Park or not.	Pearson Co- relation test

## CHAPTER 5

### DATA ANALYSIS

This chapter focuses on the analysis and findings from the data collected. The analyzed data is shown in tables and charts. For this study, 384 questionnaires were distributed to tourists at Erawan National Park. All questionnaires were returned, complete and error free. The Statistical Package for Social Science, or SPSS, was used to analyze the data.

#### 5.1 Demographic information, Visitor trip characteristic and Overall Experience

In this section, descriptive statistics were used to find the frequency of each part. There are nine parts; gender, age, nationality, number of visit, length of stay purpose of visit, size of group, category of visitors and overall experience in Erawan Nation Park.

##### 5.1.1 Gender of Visitors

Of the 384 respondents, 202 listed their gender as ‘female’, and 182 listed their gender as ‘male’. This means that 52.6% of the respondents were women, whereas 47.4% were men. Therefore, slightly more women than men visit Erawan National Park. The numbers are, however, largely equal (Table 5.1 and Figure 5.1).

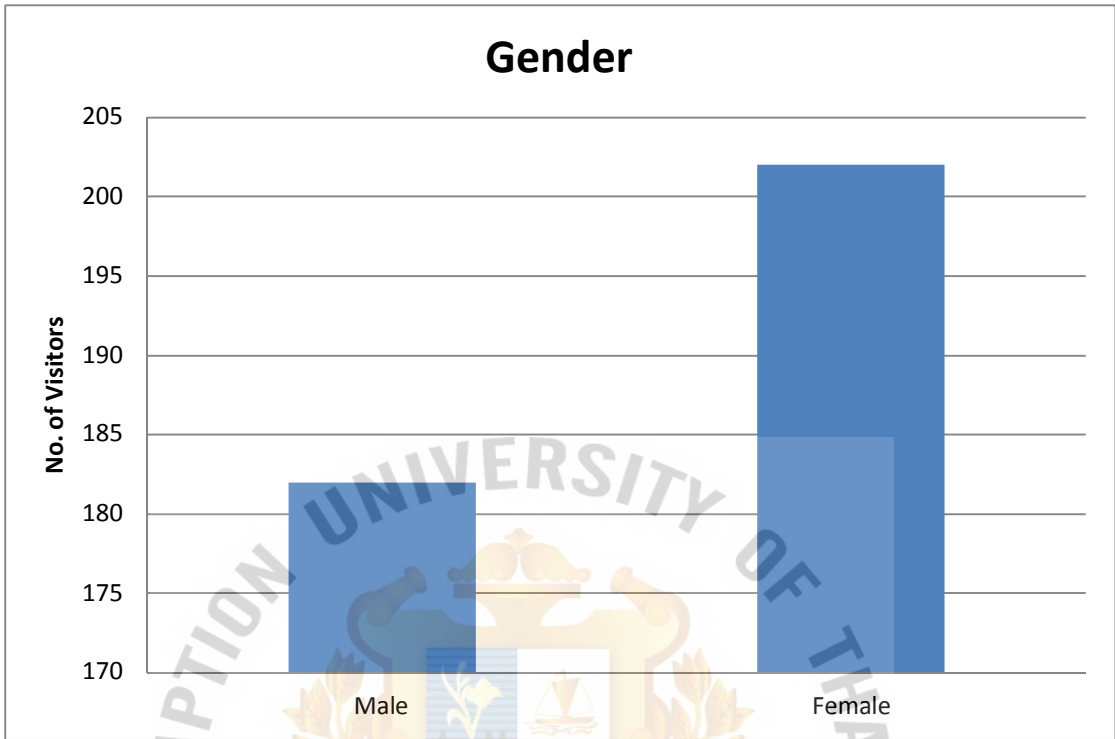
**Table 5.1 Gender of Visitors**

	<b>Frequency</b>	<b>Percentage %</b>
Male	182	47.4
Female	202	52.6
Total	384	100.0

Details gathered by the researcher as part of this study



**Figure 5.1 Gender of Visitors**



Details gathered by the researcher as part of this study

### **5.1.2 Age of Visitors**

Of the 384 questionnaires, the age group which received the most responses were visitors aged 18-34, which accounted for 114, or 29.7 percent of the total number of questionnaires. After that, the most frequently occurring age group was 35-54, accounting for 99 out of 384, or 25.8 percent. Visitors under age 18 accounted for 94 of 384, or 24.5 percent of the returned surveys, and visitors aged 55 and over accounted for the smallest group, returning 77 of 384, or 20.1, of the questionnaires (Table 5.2 and Figure 5.2).

Popularity of travel within the 18 to 34 year old age range accounts for that demographic's predominance within this variable. It's the age where travelling is the

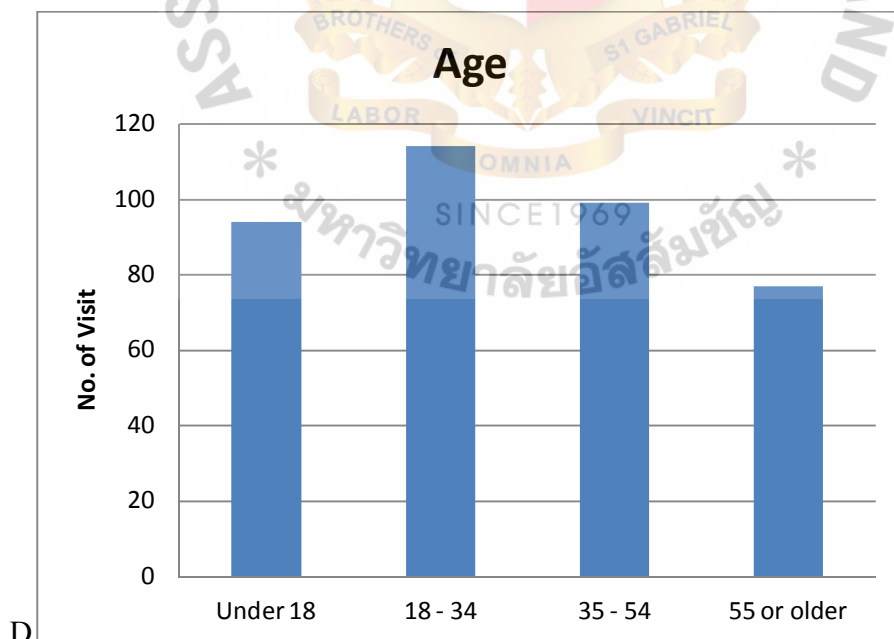
easiest, and in many western cultures it's a custom to travel internationally at that age. Most visitors under the age of 18 are likely to be visiting with parents, and this is reflected by the fact that the number of visitors under 18 and the number of visitors aged 35 to 54 each account for about one quarter of the total. Visitors aged 55 and over are the smallest group of respondents, as travelling is the most difficult at that age.

**Table 5.2 Age of Visitors**

	Frequency	Percentage %
Under 18	94	24.5
18 – 34	114	29.7
35 -54	99	25.8
55 – or older	77	20.1
Total	384	100.0

Details gathered by the researcher as part of this study

**Figure 5.2 Age of Visitors**



Details gathered by part of this study

### 5.1.3 Nationality of Visitors

The questionnaires found that about half of the visitors were Thai, and half were foreign. 197 of the 384 questionnaires were returned with ‘Thai’ marked as the nationality, making Thais account for 51.3% of the total respondents. Foreigners returned 187 of the 384 questionnaires, accounting for 48.7% of the total respondents (Table 5.3 and Figure 5.3).

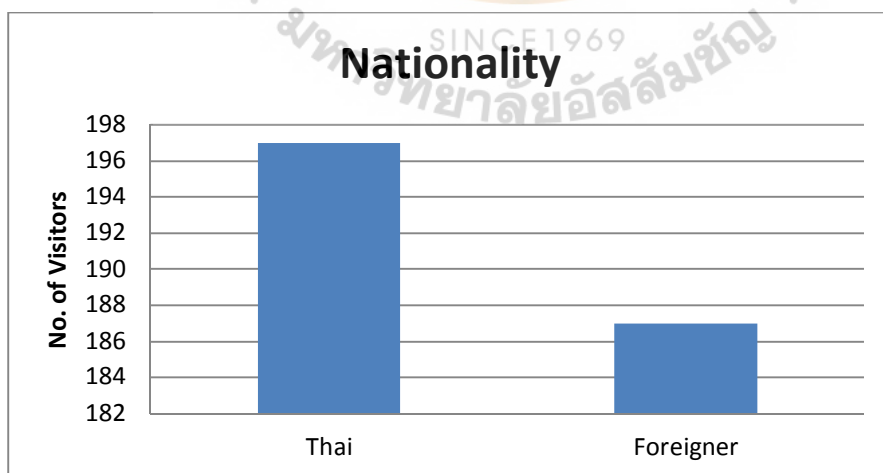
Similar to gender, the numbers are almost identical for nationality, but the slightly higher percentage of Thai visitors can possibly be explained by the popularity of domestic travel within Thailand.

**Table 5.3 Nationality of Visitors**

	Frequency	Percentage %
Thai	197	51.3
Foreigner	187	48.7
Total	384	100.0

Details gathered by the researcher as part of this study

**Figure 5.3 Nationality of Visitors**



Details gathered by the researcher as part of this study

#### 5.1.4 Number of Visits

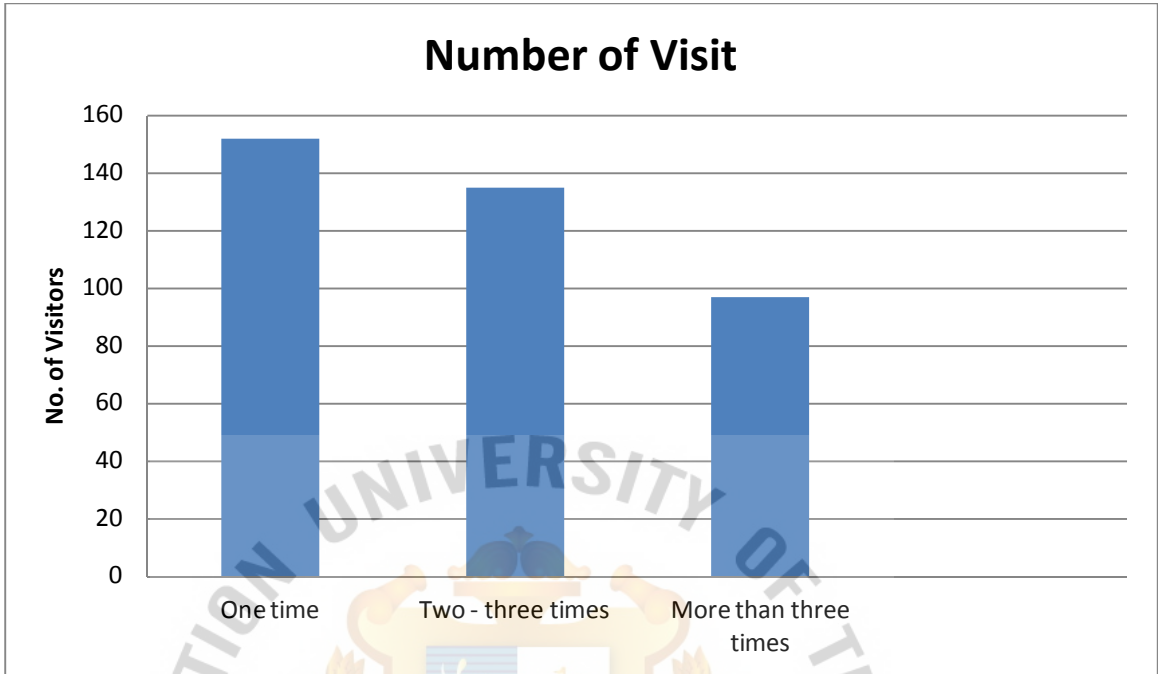
This question asked how many times the respondent had visited Erawan National Park prior to and including the visit in which they completed the survey. For the largest number of visitors, it was the first visit, and 152 respondents listed ‘one time’, accounting for 39.6% of the total. 135 respondents listed ‘two to three times’, accounting for 35.2% of the total, and 97 listed ‘more than three times’, accounting for 25.3% (Table 5.4 and figure 5.4). It is no surprise that the largest number of visitors were on their first visit to Erawan National Park. Due to the park’s popularity with foreign tourists, it’s natural that many foreigners on an extended tour of Thailand would only visit once. However, more than half of the respondents had returned to the park, indicating that return visitors are common at Erawan National Park, and that the park’s infrastructure and resources are appealing enough to draw people back for a second visit.

**Table 5.4 Number of Visits**

	Frequency	Percentage %
One time	152	39.6
Two – three times	135	35.2
More than three times Total	97	25.3
Total	384	100.0

Details gathered by the researcher as part of this study

**Figure 5.4 Number of Visits**



Details gathered by the researcher as part of this study

### 5.1.5 Length of Stay

This question asked about the respondents' intended length of stay in Erawan National Park. More than half of the respondents listed 'one day', as their length of stay, accounting for 197, or 51.3%, of the total respondents. 125 respondents listed 'two-three days', accounting for 32.6% of the total, and 62 respondents listed 'more than three days', accounting for 16.1% (Table 5.5 and Figure 5.5).

The number of visitors staying one day and the number of visitors staying more than one day come out to be equal, but it is apparent that the number of visitors decline with each additional day. Erawan National Park is mainly known for a single attraction, the waterfall, which could possibly explain the predominance of one day visitors.

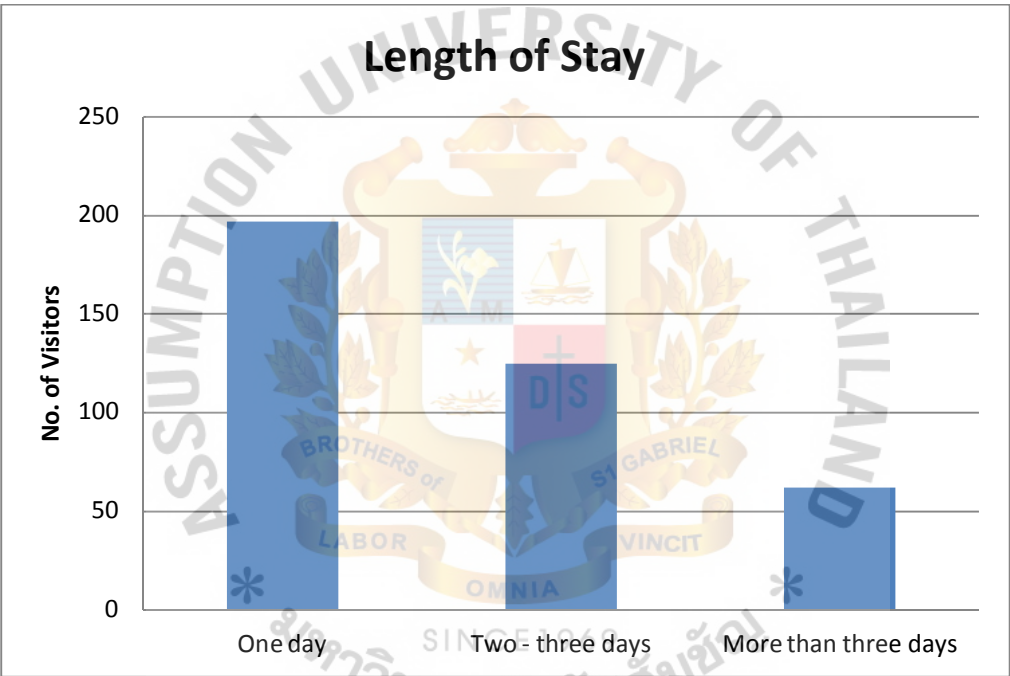


**Table 5.5 Length of Stay**

	Frequency	Percentage %
One day	197	51.3
Two – three days	125	32.6
More than three days	62	16.1
Total	384	100.0

Details gathered by the researcher as part of this study

**Figure 5.5 Length of Stay**



Details gathered by the researcher as part of this study

**5.1.6 Purpose of Visit**

This question was a multiple choice question which inquired about the primary purpose of each respondents’ visit. The largest group of respondents by far listed ‘holiday’ as the reason for their visit, accounting for 43% of the total. The next largest group listed ‘visiting the waterfall’ as their purpose for visiting. This group consisted of

66 respondents, or 17.2% of the total. The other three groups were mostly equal, with 55, or 14.3%, listing ‘adventure activities’, 50, or 13%, listing ‘education’, and 48, or 12.5%, listing ‘enjoying beautiful scenery (plants and wildlife)’ (Table 5.6 and Figure 5.6).

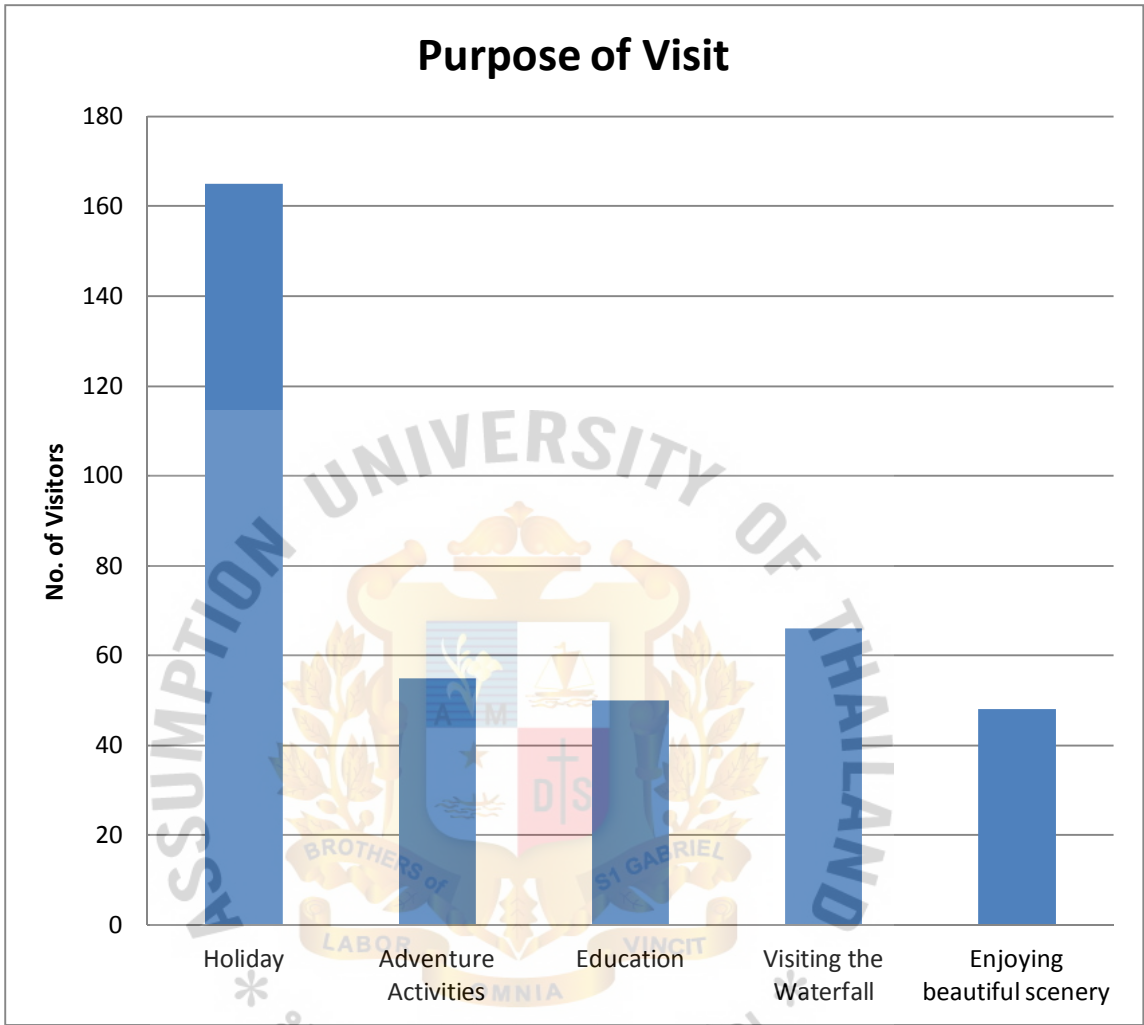
It’s clear that a majority of visitors are primarily focusing on their holiday. ‘Viewing the waterfall’ can be considered a similar purpose to ‘holiday’, because the waterfall is the primary tourist attraction for the national park. By contrast, ‘adventure activities’, ‘education’, and ‘enjoying beautiful scenery’, are all activities associated with ecotourism, and together form 39.7% of the total.

**Table 5.6 Purpose of Visit**

	<b>Frequency</b>	<b>Percentage %</b>
Holiday	165	43.0
Adventure Activities	55	14.3
Education	50	13.0
Visiting the Waterfall	66	17.2
Enjoying beautiful scenery ( Plants and animals )	48	12.5
Total	384	100.0

Details gathered by the researcher as part of this study

Figure 5.6 Purpose of Visit



Details gathered by the researcher as part of this study

### 5.1.7 Size of Group

This question asked about the number of people visiting in the group of each respondent. The largest number of respondents listed ‘with friends’, accounting for 189 questionnaires, or 49.2% of the total. 111 respondents listed ‘with family’, accounting for the second largest group, with 28.9% of the total. 59 respondents listed ‘couple’,

accounting for 15.4% of the total, and the smallest group was ‘alone’, with 25 respondents, or 6.5% of the total (Table 5.7 and Figure 5.7).

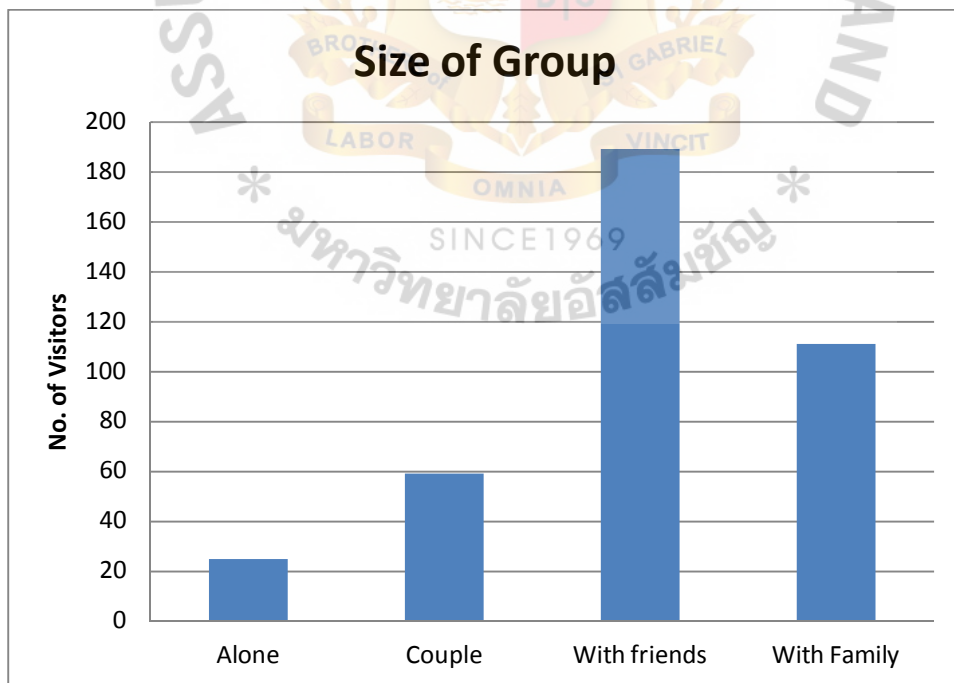
Erawan National Park is popular with package tourists, so it makes sense that the largest number of visitors would be visiting with a group, whether that group consisted of their family or their friends. Independent access to Erawan National Park is not as easy, so it makes sense that the smallest group of respondents was solo travelers.

**Table 5.7 Size of Group**

	Frequency	Percentage %
Alone	25	6.5
Couple	59	15.4
With friends	189	49.2
With family	111	28.9
Total	384	100.0

Details gathered by the researcher as part of this study

**Figure 5.7 Size of Group**



Details gathered by the researcher as part of this study

### 5.1.8 Category of Visitors

This question asked respondents to categorize themselves as either a general visitor to the park or an ecotourist or nature tourist. With only two possible answers, 283 of the 384 respondents answered that they were ‘general park visitors’, accounting for a very large 73.4% majority. 102 respondents listed themselves as ‘nature tourists/ecotourists’, accounting for 26.6% of the total number of questionnaires (Table 5.8 and Figure 5.8).

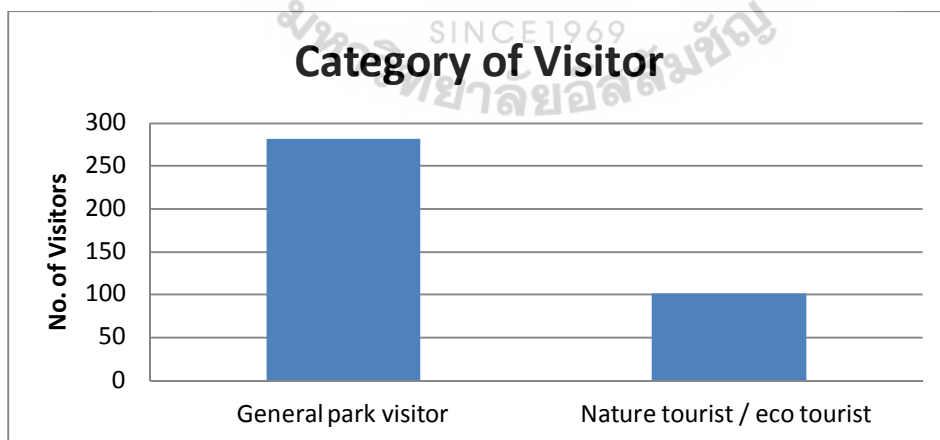
**Table 5.8 Category of Visitors**

	Frequency	Percentage %
General park visitor	283	73.4
Nature tourist / eco tourist	102	26.6
Total	384	100.0

Details gathered by the researcher as part of this study

As Erawan National Park is mainly popular as an easily accessible weekend destination, it makes sense that ecotourists form the minority.

**Figure 5.8 Category of Visitors**



Details gathered by the researcher as part of this study

### 5.1.9 Overall Experience in Erawan National Park

The overall experience in Erawan National Park of respondents to the survey was mainly positive. 244 respondents listed their overall experience as being ‘good’, accounting for 63.5% of the responses. 76 respondents listed their experience as being ‘ordinary’, accounting for the second largest group, or 19.8% of the total surveys. The third most frequent response, by a narrow margin, was ‘excellent’, with 62 respondents, or 16.1% of the total. Only 2 respondents listed their experience as being ‘bad’, accounting for half a percent of the total number of surveys (Table 5.9 and Figure 5.9).

This shows that, as a whole, visitor impressions of Erawan National Park are positive. Although not every respondent found the experience remarkable, very few had a negative opinion of the park at the time of collected data.

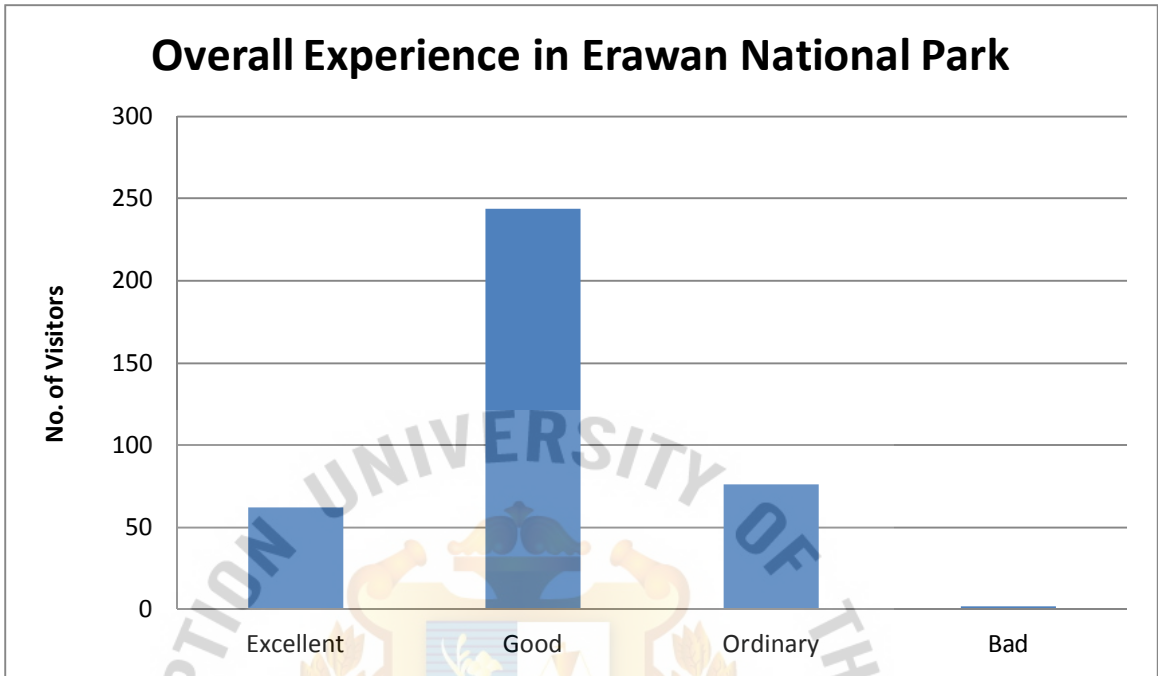
**Table 5.9 Overall Experience in Erawan National Park**

	Frequency	Percentage %
Excellent	62	16.1
Good	244	63.5
Ordinary	76	19.8
Bad	2	.5
Total	384	100.0

Details gathered by the researcher as part of this study



**Figure 5.9 Overall Experience in Erawan National Park**



Details gathered by the researcher as part of this study

**5.2 Motivation for Visiting Erawan National Park**

This section asks respondents to rate the importance of various factors in motivating them to visit Erawan National Park. According to Table 5.10, all items on this list received a positive ranking. Erawan National Park’s location makes it a popular weekend destination for Thais and foreigners living in Bangkok, and a logical early stop for foreign tourists traveling through Thailand. It therefore makes sense that the item which received the most positive response is ‘rest (relaxation)’, which has a mean value of 4.23, implying that visitors come to Erawan National Park for the purpose of escaping the stress and relaxing. A strong rating is also given to ‘landscape (beauty of nature)’ at 4.16, indicating the park’s reputation as a beautiful place. The Erawan waterfall also proves a

very powerful draw, with ‘waterfall (swimming, picnic)’ receiving a mean value of 4.04. A strong mean value for ‘forest (flowers)’, further indicates the draw of the park’s natural beauty, and another strong rating for ‘escape from city life (to change the normal routine)’ reinforces the park’s proximity to the city as an important factor.

**Table 5.10 Mean and Standard Deviation of Motivation**

<b>Motivation for visiting park</b>	<b>Mean</b>	<b>Std. Deviation</b>
Waterfall ( swimming, picnic)	4.04	.93
Forest ( flowers)	3.96	.94
Escape from city life ( to change the normal routine)	3.79	1.06
Camping ( skill to set up tent, socialize)	3.35	1.17
Adventure ( biking )	3.32	1.23
Rest ( relaxation)	4.23	.86
Landscape ( beauty of nature)	4.16	.78
Nature walk (a complementary tour guide service accompany you)	3.52	1.01
Environmental problems (to get awareness of garbage and waste disposal)	3.56	1.12
Support local communities ( buy local souvenirs)	3.28	1.07

Details gathered by the researcher as part of this study

Outdoor activities, though highly rated, were listed as a relatively weak draw compared to the natural beauty of the park, with ‘camping’, ‘adventure (biking)’, and ‘nature walk’ receiving mean ratings of 3.35, 3.32, and 3.52 respectively. Educational purposes received similar ratings, with ‘environmental problems’ receiving a mean rating of 3.56, and ‘support local communities’ being the least important item, receiving a mean rating of 3.28.

### **5.3 Activities Participated in at Erawan National Park**

This question asked respondents to rate the importance of various activities they had participated in while visiting Erawan National Park. All of the items in this section

received a positive ranking (Table 5.11). The simplest of all tourist activities consist of going, seeing, and taking pictures, and these were ranked the highest. ‘Sightseeing’ had the highest mean rating, at 4.16, with ‘photography’ coming in close second, with a mean rating of 4.15. ‘Landscape observation’ was the third highest ranked, with a mean rating of 4.10.

**Table 5.11 Mean and Stand Deviation of Activities**

Activities	Mean	Std. Deviation
Sight seeing	4.16	.84
Photography	4.15	.91
Swimming in the waterfall	3.87	1.03
Learning about nature	3.89	.93
Bird and Butterfly watching	3.62	1.02
Nature walking	3.58	.98
Camping	3.42	1.14
Landscape observation	4.10	.85
Biking	3.05	1.18

Details gathered by the researcher as part of this study

Erawan National Park is famous as a beautiful natural destination, with many beautiful features, such as the Erawan waterfall and beautiful wildlife. ‘Swimming in the waterfall’ proved a popular activity, with a mean rating of 3.87, and ‘bird and butterfly watching’ also proved popular, with a mean rating of 3.62. Education is a predominant concern of visitors to parks like Erawan National Park, and ‘learning about nature’ ranked the fourth strongest of all the items, with a mean rating of 3.89. Conventional outdoor activities were also ranked well, with ‘nature walking’ and ‘camping’ receiving mean ratings of 3.58 and 3.42 respectively. ‘Biking’ proved the least popular activity, with a mean rating of 3.05, as Erawan National Park is not a famous destination for biking.

## 5.4 Problem Encountered during Stay in Erawan National Park

This section asked visitors to identify the problems they encountered, with a high rating indicating no problem, and a low rating indicating a serious problem. All of the items in this section received a positive rating, although none had a mean rating of over 4.00, indicating that although every problem was encountered, none was a serious issue for most visitors (Table 5.12).

**Table 5.12 Mean and Stand Deviation of Problem**

<b>Problems in Erawan National Park</b>	<b>Mean</b>	<b>Std. Deviation</b>
Lack of enforcement of park regulation	3.52	1.01
Lack of staffs	3.51	.98
Litter cans inadequate/absent	3.27	1.02
Missing or inadequate information	3.46	.97
Missing sign	3.48	1.01
Public restroom absent	3.35	1.08
Poor access to park	3.54	.98
Overcrowded during weekend and holiday	3.57	3.11
Accommodation without comfort	3.40	1.02
Safety and security	3.53	1.02
Conflict with other recreation activities	3.53	1.78
Inadequate car parking	3.53	1.03
Entrance fee/camping fee	3.53	1.11

Details gathered by the researcher as part of this study

Waste disposal is a very difficult issue to tackle in a heavily-visited national park, and problems related to waste disposal form the largest source of annoyance to respondents. ‘Litter cans inadequate/absent’ stands out as the most predominant concern, with a mean rating of 3.27, and ‘public restrooms absent’ also stand out, with a mean rating of 3.35. ‘Accommodation without comfort’ also proved to be a slightly more predominant concern than the rest, with a mean rating of 3.40.

After waste disposal issues and accommodation, information proved to be the predominant concern of the respondents. ‘Missing sign’ received a mean rating of 3.48, and ‘missing or inadequate information’ received a mean rating of 3.46. The rest of the items were related to organization and infrastructure, and all ranked about the same. ‘Lack of enforcement of park regulations’ and ‘lack of staffs’ received mean ratings of 3.52 and 3.51 respectively, while ‘conflict with other recreation activities’, ‘inadequate car parking’, and ‘entrance fee/camping fee’ all received mean ratings of 3.53. The two items which received the highest ratings were ‘poor access to park’, with a mean rating of 3.54, and ‘overcrowded during weekends and holidays’, with a mean rating of 3.57.

### **5.5 Recommended Management Action**

This section asked respondents to rank their support for particular management actions, with a response of 1 indicating strong opposition and a response of 5 indicating strong support. According to Table 5.13, all of the proposed actions except one received a mostly positive response of over 3.00.

The items relating to visitor information all received very strong support. Education is the primary objective of a national park and one of the main reasons people choose to visit a national park, and as such, ‘educate visitors more about conservation’ received very strong support, with a mean rating of 4.04. ‘Provide more maps and signs at different points for directions’ received the strongest support, with a mean rating of 4.06. Providing a brochure or map to inform and assist visitors also received a strong vote, with a mean average 3.79.

**Table 5.13 Recommended Management Action**

<b>Management Action</b>	<b>Mean</b>	<b>Std. Deviation</b>
Educate visitors more about conservation	4.04	.85
Provide more map and sign at different point for direction	4.06	2.25
Limit overall number of visitors	3.37	1.07
Limit number of people per group	3.33	1.48
Provide more staffs	3.64	.99
Limit length of stay	3.14	1.08
Provide souvenir product	3.56	.95
Provide brochure, map	3.79	.96
Allow unguided walk	2.91	1.28
No additional infrastructure, keep the park as it is	3.88	1.03
Provide more amenities for comfortable stay	3.85	.94
Reduce Entrance fee	3.71	1.05
Provide special package	3.96	.95
Lot of car parking	3.61	.97

Details gathered by the researcher as part of this study

Some of the measures used for limiting environmental impact in a popular national park include limiting the number of visitors, the size of the groups, and the length of the visitors stay. All of these actions received relatively low ratings. ‘Limit overall number of visitors’ received a barely positive mean rating of 3.37, while ‘limit number of people per group’ received a rating of 3.33. ‘Limit length of stay’ received an even lower rating of 3.14.

The remaining items all related to making the experience more convenient for the visitors, and received a variety of responses. ‘Provide more staffs ‘ received a positive response of 3.64. ‘Provide souvenir product’ received a mean rating of 3.56, indicating support for expanding the souvenirs available. ‘Allow unguided walk’ received the lowest ranking, not just of the section, but of the entire survey, with a mean rating of 2.91. This is probably due to concern by the respondents for the natural environment of the park, but could also represent a desire to have the assistance of a local guide and not



be left to explore the park on one's own. Visitors expressed strong support for providing more amenities for a comfortable stay, reducing the entry fee, and expanding the car parking, with respective mean averages of 3.85, 3.71, and 3.61. 'Provide special package' also proved popular, with a very strong mean rating of 3.96.

In contrast to all this, another item that received high support was 'no additional infrastructure, keep the park as it is', which was the fourth most popular item, with a mean rating of 3.88.

## **5.6 Hypothesis Testing**

### **5.6.1 Hypothesis 1: Gender – Problems Encountered**

Ho1: The differences in tourists's problem encountered during visit/stay in the Erawan National Park with regard to gender is not significant.

Ha1: The differences in tourists's problem encountered during visit/stay in the Erawan National Park with regard to gender is significant.

Table 5.14 features thirteen potential problems, and the significance of their relationship to gender. These include 'lack of enforcement of park regulation', which has a significance value of  $p = 0.066$ , 'lack of staffs', with a significance value of  $p = 0.597$ , 'litter cans inadequate/absent', with a significance value of  $p = 0.411$ , 'missing or inadequate information', which has a significance value of  $p = 0.668$ , 'missing sign', which has a significance value of  $p = 0.427$ , 'public restroom absent', with a significance value of  $p = 0.304$ , 'poor access to park', which has a significance value of  $p = 0.634$ , 'overcrowded during weekend and holiday', with a significance value of  $p = 0.505$ , 'accommodation without comfort', which has a significance value of  $p = 0.687$ , 'safety

and security’, which has a significance value of  $p = 0.934$ , ‘conflict with other recreation activities, which has a significance value of  $p = 0.770$ , ‘inadequate car parking, with a significance value of  $p = 0.383$ , and ‘entrance fee/camping fee’, with a significance value of 0.954.

Of all the thirteen items, none have a significance level that is lower than 0.05. Therefore, they all fail to reject the null hypothesis, and none of them can be considered significant. Therefore, it can be concluded that based on gender, the problems encountered by tourists do not differ.

**Table 5.14 T-Test for Hypothesis 1**

		Levene's Test for		t-test for Equality of Means						
		Equality of								
		Variances								
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Lack of enforcement of park regulation	Equal variances assumed	.014	.907	1.84	382	.066	.19073	.1035	-.01290	.39436
	Equal variances not assumed			1.84	377.56	.066	.19073	.1035	-.01294	.39440

Continued.....

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Lack of staffs	Equal variances assumed	.564	.453	.529	382	.597	.05331	.1008	-.14490	.25153
	Equal variances not assumed			.530	381.20	.596	.05331	.1005	-.14429	.25092
Litter cans inadequate/absent	Equal variances assumed	.281	.597	-.823	382	.411	-.08606	.1045	-.29170	.11957
	Equal variances not assumed			-.823	378.337	.411	-.08606	.1045	-.29164	.11951
Missing or in adequate information	Equal variances assumed	.002	.966	.430	382	.668	.04292	.09993	-.15357	.23941
	Equal variances not assumed			.429	376.782	.668	.04292	.10000	-.15371	.23955
Missing sign	Equal variances assumed	.262	.609	.795	382	.427	.08247	.10370	-.12143	.28637
	Equal variances not assumed			.794	374.676	.428	.08247	.10389	-.12182	.28676

Continued...

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Public restroom absent	Equal variances assumed	.205	.651	-1.02	382	.304	-.11419	.11103	-.33250	.10412
	Equal variances not assumed			-1.02	376.230	.305	-.11419	.11114	-.33273	.10435
Poor access to park	Equal variances assumed	.440	.507	-.477	382	.634	-.04787	.10046	-.24540	.14966
	Equal variances not assumed			-.478	381.325	.633	-.04787	.10014	-.24476	.14901
Overcrowded during weekend and holiday	Equal variances assumed	3.982	.047	.668	382	.505	.07600	.11381	-.14777	.29977
	Equal variances not assumed			.672	381.979	.502	.07600	.11315	-.14647	.29847
Accommodation without comfort	Equal variances assumed	.886	.347	.404	382	.687	.04243	.10516	-.16433	.24920
	Equal variances not assumed			.405	381.670	.686	.04243	.10475	-.16353	.24839

Continued....

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Safety and security	Equal variances assumed	1.939	.165	.083	382	.934	.00876	.10504	-.19778	.21530
	Equal variances not assumed			.084	381.541	.933	.00876	.10466	-.19703	.21455
Conflict with other recreation activities	Equal variances assumed	1.156	.283	-.292	382	.770	-.05337	.18258	-.41235	.30562
	Equal variances not assumed			-.303	273.968	.762	-.05337	.17596	-.39978	.29304
Inadequate car parking	Equal variances assumed	.052	.819	.873	382	.383	.09232	.10572	-.11554	.30018
	Equal variances not assumed			.873	376.818	.383	.09232	.10579	-.11569	.30033
Entrance fee / camping fee	Equal variances assumed	1.245	.265	-.058	382	.954	-.00664	.11402	-.23083	.21755
	Equal variances not assumed			-.058	381.219	.953	-.00664	.11367	-.23014	.21680

Continued....

### 5.6.2 Hypothesis 2: Age – Problems Encountered

Ho2: The differences in tourists's problem encountered during visit/stay in the Erawan National Park with regard to age is not significant.

Ha2: The differences in tourists's problem encountered during visit/stay in the Erawan National Park with regard to age is significant.

Table 5.15 features thirteen potential problems, and the significance of their relation to age. These include 'lack of enforcement of park regulation', which has a significance value of  $p = 0.059$ , 'lack of staffs', with a significance value of  $p = 0.962$ , 'litter cans inadequate/absent', with a significance value of  $p = 0.356$ , 'missing or inadequate information', which has a significance value of  $p = 0.451$ , 'missing sign', which has a significance value of  $p = 0.159$ , 'public restroom absent', with a significance value of  $p = 0.728$ , 'poor access to park', which has a significance value of  $p = 0.254$ , 'overcrowded during weekend and holiday', with a significance value of  $p = 0.224$ , 'accommodation without comfort', which has a significance value of  $p = 0.598$ , 'safety and security', which has a significance value of  $p = 0.273$ , 'conflict with other recreation activities, which has a significance value of  $p = 0.417$ , 'inadequate car parking, with a significance value of  $p = 0.453$ , and 'entrance fee/camping fee', with a significance value of  $p = 0.954$ .

All thirteen items have significance levels which come out to more than 0.05.

Therefore, all twelve items failed to reject the null hypothesis. This means that there is



**Table 5.15 One Way ANOVA for Hypothesis 2**

		Sum of Squares	df	Mean Square	F	Sig.
Lack of enforcement of park regulation	Between Groups	7.667	3	2.556	2.503	.059
	Within Groups	388.073	380	1.021		
	Total	395.740	383			
Lack of staffs	Between Groups	.285	3	.095	.097	.962
	Within Groups	371.674	380	.978		
	Total	371.958	383			
Litter cans inadequate/absent	Between Groups	3.396	3	1.132	1.083	.356
	Within Groups	397.344	380	1.046		
	Total	400.740	383			
Missing or in adequate information	Between Groups	2.524	3	.841	.881	.451
	Within Groups	362.890	380	.955		
	Total	365.414	383			
Missing sign	Between Groups	5.326	3	1.775	1.736	.159
	Within Groups	388.632	380	1.023		
	Total	393.958	383			
Public restroom absent	Between Groups	1.550	3	.517	.436	.728
	Within Groups	450.573	380	1.186		
	Total	452.122	383			
Poor access to park	Between Groups	3.930	3	1.310	1.362	.254
	Within Groups	365.403	380	.962		
	Total	369.333	383			
Overcrowded during weekend and holiday	Between Groups	5.422	3	1.807	1.465	.224
	Within Groups	468.826	380	1.234		
	Total	474.247	383			
Accommodation without comfort	Between Groups	1.993	3	.664	.627	.598
	Within Groups	402.632	380	1.060		
	Total	404.625	383			

		Sum of Squares	df	Mean Square	F	Sig
Safety and security	Between Groups	4.113	3	1.371	1.304	.273
	Within Groups	399.447	380	1.051		
	Total	403.560	383			
Conflict with other recreation activities	Between Groups	9.065	3	3.022	.949	.417
	Within Groups	1210.349	380	3.185		
	Total	1219.414	383			
Inadequate car parking	Between Groups	2.818	3	.939	.878	.453
	Within Groups	406.742	380	1.070		
	Total	409.560	383			
Entrance fee / camping fee	Between Groups	5.439	3	1.813	1.466	.223
	Within Groups	470.051	380	1.237		
	Total	475.490	383			

no significant relationship between age and the problems encountered by tourists visiting Erawan National Park.

### 5.6.3 Hypothesis 3: Nationality – Problems Encountered

Ho3: The differences in tourists's problem encountered during visit/stay in the Erawan National Park with regard to nationality is not significant.

Ha3: The differences in tourists's problem encountered during visit/stay in the Erawan National Park with regard to nationality is significant.

In Table 5.16, one item has a significance level lower than 0.05. This is 'lack of staffs' ( $p = .019$ ). This item rejects the null hypothesis. Therefore, it holds a significant difference with regards to nationality.

By contrast, the other twelve items have significance levels higher than 0.05, and therefore fail to reject the null hypothesis. No significance is found connecting these items to nationality. The items that reject the null hypothesis include 'lack of enforcement

of park regulation' ( $p = .521$ ), 'litter cans inadequate/absent' ( $p = .592$ ), 'missing or inadequate information' ( $p = .337$ ), 'missing signs' ( $p = .884$ ), 'public restroom absent' ( $p = .469$ ), 'poor access to park' ( $p = .167$ ), 'overcrowded during weekend and holiday' ( $p = .673$ ), 'accommodation without comfort' ( $p = .113$ ), 'safety and security' ( $p = .094$ ), 'conflict with other recreation activities' ( $p = .258$ ), 'inadequate car parking' ( $p = .384$ ), and 'entrance fee/camping fee' ( $p = .950$ ).

**Table 5.16 T-Test for Hypothesis 3**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Lack of enforcement of park regulation	Equal variances assumed	2.002	.158	-.565	382	.572	-.05869	.10387	-.26292	.14555
	Equal variances not assumed			-.567	380.037	.571	-.05869	.10354	-.26227	.14489
Lack of staffs	Equal variances assumed	.011	.918	-2.350	382	.019(*)	-.23508	.10003	-.43175	-.03841
	Equal variances not assumed			-2.350	380.730	.019(*)	-.23508	.10004	-.43178	-.03838
Litter cans inadequate/absent	Equal variances assumed	7.890	.005	-.537	382	.592	-.05608	.10453	-.26161	.14945
	Equal variances not assumed			-.539	373.983	.590	-.05608	.10399	-.26057	.14840

Continued...

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Missing or in adequate information	Equal variances assumed	1.587	.208	.961	382	.337	.09585	.09974	-.10025	.2919
	Equal variances not assumed			.959	375.873	.338	.09585	.09993	-.10065	.2923
Missing sign	Equal variances assumed	.116	.733	-.146	382	.884	-.01509	.10368	-.21895	.1887
	Equal variances not assumed			-.146	381.164	.884	-.01509	.10366	-.21892	.1887
Public restroom absent	Equal variances assumed	6.955	.009	.725	382	.469	.08043	.11100	-.13781	.2986
	Equal variances not assumed			.727	379.053	.468	.08043	.11059	-.13702	.2978
Poor access to park	Equal variances assumed	.093	.761	1.384	382	.167	.13855	.10014	-.05834	.3354
	Equal variances not assumed			1.384	381.406	.167	.13855	.10011	-.05828	.3353

Continued....

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Overcrowded during weekend and holiday	Equal variances assumed	2.471	.117	.423	382	.673	.04807	.11373	-.17554	.27169
	Equal variances not assumed			.424	380.694	.672	.04807	.11340	-.17490	.27105
Accommodation without comfort	Equal variances assumed	.006	.936	1.589	382	.113	.16645	.10473	-.03947	.37238
	Equal variances not assumed			1.589	380.748	.113	.16645	.10474	-.03950	.37241
Safety and security	Equal variances assumed	4.451	.036	1.678	382	.094	.17544	.10455	-.03013	.38101
	Equal variances not assumed			1.673	370.424	.095	.17544	.10490	-.03083	.38170
Conflict with other recreation activities	Equal variances assumed	.399	.528	1.134	382	.258	.20644	.18211	-.15162	.56450
	Equal variances not assumed			1.154	270.122	.250	.20644	.17888	-.14575	.55862

Continued....

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Inadequate car parking	Equal variances assumed	.665	.415	.872	382	.384	.09205	.10561	-.11560	.29970
	Equal variances not assumed			.873	381.999	.383	.09205	.10547	-.11533	.29943
Entrance fee / camping fee	Equal variances assumed	.448	.504	-.062	382	.950	-.00711	.11391	-.23107	.21685
	Equal variances not assumed			-.062	381.925	.950	-.00711	.11379	-.23085	.21663

### Lack of Staffs

Table 5.17 shows the group statistics for hypothesis 3. The single significant item is ‘lack of staffs. Foreign respondents had fewer problems with the lack of staffs, responding with a mean score of 3.63. Thai respondents had more problems and expressed lower satisfaction, responding with a mean of 3.39. A response of 3 indicates a “slight problem” that happened but did not annoy, whereas a response of 4 indicates a “problem”. This means that both Thai and foreign respondents encountered problems with the lack of staffs, but it annoyed the Thai visitors significantly more than it annoyed



the foreign visitors. This is likely due to the fact that foreign tourists, being in a foreign country, are generally less demanding than domestic tourists. Many of the Thai visitors were visiting from Bangkok on a shorter trip than the foreign visitors, and as such, were more likely to expect a smoother and easier experience.

**Table 5.17 Group Statistics for Hypothesis 3**

Nationality		N	Mean	Std. Deviation	Std. Error Mean
Lack of enforcement of park regulation	Thai	197	3.49	1.08	.07672
	foreigner	187	3.55	.95	.06953
Lack of staffs	Thai	197	3.39	.98	.06961
	foreigner	187	3.63	.98	.07185
Litter cans inadequate/absent	Thai	197	3.24	1.12	.07963
	foreigner	187	3.30	.91	.06689
Missing or in adequate information	Thai	197	3.50	.94	.06698
	foreigner	187	3.41	1.01	.07416
Missing sign	Thai	197	3.48	1.02	.07254
	foreigner	187	3.49	1.01	.07405
Public restroom absent	Thai	197	3.39	1.16	.08255
	foreigner	187	3.31	1.01	.07359
Poor access to park	Thai	197	3.61	.99	.07031
	foreigner	187	3.47	.97	.07125
Overcrowded during weekend and holiday	Thai	197	3.40	1.17	.08352
	foreigner	187	3.35	1.05	.07672
Accommodation without comfort	Thai	197	3.49	1.02	.07290
	foreigner	187	3.32	1.03	.07521
Safety and security	Thai	197	3.62	.96	.06836
	1 foreigner	187	3.44	1.09	.07956
Conflict with other recreation activities	Thai	197	3.64	2.29	.16344
	foreigner	187	3.43	.99	.07272
Inadequate car parking	Thai	197	3.59	1.06	.07549
	foreigner	187	3.49	1.01	.07366
Entrance fee / camping fee	Thai	197	3.53	1.14	.08095
	foreigner	187	3.54	1.09	.07997

#### 5.6.4 Hypothesis 4: Gender – Support for Management Action

Ho4: The differences in tourists's support for management action in the Erawan National Park with regard to gender is not significant.

Ha4: The differences in tourists's support for management action in the Erawan National Park with regard to gender is significant.

Table 5.18 features fourteen possible management actions for Erawan National Park and the relation in support for them with regards to gender. These include 'educate visitors more about conservation', which has a significance value of  $p = 0.905$ , 'limit overall number of visitors', which has a significance value of  $p = 0.653$ , 'limit number of people per group', with a significance value of  $p = 0.653$ , 'provide more staffs', with a significance value of  $p = 0.801$ , 'limit length of stay', with a significance value of  $p = 0.219$ , 'provide souvenir product', which has a significance value of  $p = 0.314$ , 'provide brochure and map', with a significance value of  $p = 0.370$ , 'allow unguided walk', with a significance value of  $p = 0.253$ , 'no additional infrastructure, keep the park as it is', with a significance value of  $p = 0.056$ , 'provide more amenities for comfortable stay', with a significance value of  $p = 0.994$ , 'reduce entrance fee', which has a significance of  $p = 0.655$ , 'provide special package', with a significance value of  $p = 0.604$ , and 'lot of car parking', with a significance value of  $p = 0.304$ .

None of the fourteen items holds a significance level lower than 0.05. This means that none of the fourteen items succeed in rejecting the null hypothesis, and therefore, the difference must be regarded as insignificant.

**Table 5.18 T-Test for Hypothesis 4**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Educate visitors about more conservation	Equal variances assumed	3.279	.071	.119	382	.905	.01039	.08719	-.16105	.18183
	Equal variances not assumed			.118	360.462	.906	.01039	.08784	-.16235	.18313
Provide more map and sign at different point for direction	Equal variances assumed	1.533	.216	-1.013	382	.312	-.23316	.23026	-.68590	.21957
	Equal variances not assumed			-1.059	233.711	.291	-.23316	.22012	-.66684	.20051
Limit overall number of visitors	Equal variances assumed	.117	.732	.449	382	.653	.04961	.11040	-.16746	.26668
	Equal variances not assumed			.449	376.143	.654	.04961	.11052	-.16770	.26693
Limit number of people per group	Equal variances assumed	1.873	.172	-.253	382	.801	-.03830	.15148	-.33614	.25954
	Equal variances not assumed			-.259	331.902	.796	-.03830	.14772	-.32888	.25228

Continued....

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Provide more staffs	Equal variances assumed	.096	.757	-.413	382	.680	-.04194	.10158	-.24167	.15778
	Equal variances not assumed			-.412	376.156	.680	-.04194	.10169	-.24189	.15800
Limit length of stay	Equal variances assumed	.707	.401	-1.230	382	.219	-.13595	.11053	-.35326	.08137
	Equal variances not assumed			-1.230	377.424	.220	-.13595	.11056	-.35333	.08144
Provide souvenir product	Equal variances assumed	.294	.588	-1.007	382	.314	-.09792	.09721	-.28905	.09321
	Equal variances not assumed			-1.009	380.235	.313	-.09792	.09702	-.28869	.09285
Provide brochure, map	Equal variances assumed	.032	.859	-.897	382	.370	-.08884	.09905	-.28359	.10591
	Equal variances not assumed			-.898	379.483	.370	-.08884	.09893	-.28336	.10568

Continued...

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Allow unguided walk	Equal variances assumed	.127	.722	-1.145	382	.253	-.14998	.13104	-.40763	.10767
	Equal variances not assumed			-1.145	377.993	.253	-.14998	.13103	-.40762	.10765
No additional infrastructure, keep the park as it is	Equal variances assumed	.449	.503	1.916	382	.056	.20188	.10534	-.00524	.40900
	Equal variances not assumed			1.919	379.370	.056	.20188	.10522	-.00501	.40877
Provide more amenities for comfortable stay	Equal variances assumed	3.253	.072	.007	382	.994	.00071	.09658	-.18918	.19060
	Equal variances not assumed			.007	361.884	.994	.00071	.09725	-.19053	.19195
Reduce entrance fee	Equal variances assumed	.038	.846	.448	382	.655	.04814	.10751	-.16323	.25952
	Equal variances not assumed			.448	378.888	.654	.04814	.10743	-.16309	.25937

Continued....

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Provide special package	Equal variances assumed	1.885	.171	-.519	382	.604	-.05054	.09731	-.24187	.14079
	Equal variances not assumed			-.518	373.371	.605	-.05054	.09755	-.24236	.14128
Lot of car parking	Equal variances assumed	2.405	.122	-1.030	382	.304	-.10238	.09942	-.29786	.09309
	Equal variances not assumed			-1.025	368.784	.306	-.10238	.09986	-.29875	.09399

### 5.6.5 Hypothesis 5: Age – Support for Management Action

Ho5: The differences in tourists's support for management action in the Erawan National Park with regard to age is not significant.

Ha5: The differences in tourists's support for management action in the Erawan National Park with regard to age is significant.

In Table 5.19, two items have a significant level below 0.05. These items are 'limit overall number of visitors' ( $p = .007$ ), and 'allow unguided walk' ( $p = .000$ ). These two



items reject the null hypothesis and accept the alternative hypothesis. Therefore, age is significant in regards to support for these two management actions.

In addition, there are twelve items which fail to reject the null hypothesis. These include ‘educate visitors more about conservation’ ( $p = .347$ ), ‘provide more maps and signs at different points for directions’ ( $p = .866$ ), ‘limit number of people per group’ ( $p = .116$ ), ‘provide more staffs’ ( $p = .221$ ), ‘limit length of stay’ ( $p = .087$ ), ‘provide souvenir products’ ( $p = .368$ ), ‘provide brochures and maps’ ( $p = .217$ ), ‘no additional infrastructure, keep the park as it is’ ( $p = .325$ ), ‘provide more amenities for a comfortable stay’ ( $p = .957$ ), ‘reduce entrance fee’ ( $p = .388$ ), ‘provide special package’ ( $p = .135$ ), and ‘lot of car parking’ ( $p = .067$ ). For these items, the null hypothesis is not rejected, and no significant level of difference is found.

**Table 5.19 One Way ANOVA for Hypothesis 5**

		Sum of Squares	df	Mean Square	F	Sig.
Educate visitors about more conservation	Between Groups	2.404	3	.801	1.104	.347
	Within Groups	275.656	380	.725		
	Total	278.060	383			
Provide more map and sign at different point for direction	Between Groups	3.728	3	1.243	.243	.866
	Within Groups	1940.512	380	5.107		
	Total	1944.240	383			
Limit overall number of visitors	Between Groups	14.151	3	4.717	4.151	.007(*)
	Within Groups	431.849	380	1.136		
	Total	446.000	383			

Continued.....

		Sum of Squares	df	Mean Square	F	Sig.
Limit number of people per group	Between Groups	12.946	3	4.315	1.984	.116
	Within Groups	826.388	380	2.175		
	Total	839.333	383			
Provide more staffs	Between Groups	4.349	3	1.450	1.476	.221
	Within Groups	373.190	380	.982		
	Total	377.539	383			
Limit length of stay	Between Groups	7.669	3	2.556	2.203	.087
	Within Groups	440.870	380	1.160		
	Total	448.539	383			
Provide souvenir product	Between Groups	2.865	3	.955	1.056	.368
	Within Groups	343.635	380	.904		
	Total	346.500	383			
Provide brochure, map	Between Groups	4.181	3	1.394	1.490	.217
	Within Groups	355.379	380	.935		
	Total	359.560	383			
Allow unguided walk	Between Groups	29.891	3	9.964	6.308	.000(*)
	Within Groups	600.273	380	1.580		
	Total	630.164	383			
No additional infrastructure, keep the park as it is	Between Groups	3.715	3	1.238	1.159	.325
	Within Groups	406.011	380	1.068		
	Total	409.727	383			
Provide more amenities for comfortable stay	Between Groups	.283	3	.094	.105	.957
	Within Groups	340.839	380	.897		
	Total	341.122	383			
Reduce entrance fee	Between Groups	3.347	3	1.116	1.011	.388
	Within Groups	419.567	380	1.104		
	Total	422.914	383			
Provide special package	Between Groups	5.024	3	1.675	1.863	.135
	Within Groups	341.536	380	.899		
	Total	346.560	383			
Lot of car parking	Between Groups	6.759	3	2.253	2.407	.067
	Within Groups	355.731	380	.936		
	Total	362.490	383			

## **Post Hoc test for Hypothesis 5**

### **Limit Overall Number of Visitors**

The post-hoc test shows that  $I (55 \text{ or older}) - J (35-54) = .567$ ,  $I (\text{under } 18) - J (35-54) = .294$ , and  $I (55 \text{ or older}) - J (18-34) = .337$ . This indicates that the oldest and youngest visitors indicate the most support for limiting the crowds. It also shows a significant level of difference between the support expressed by visitors aged 55 and older, who show the largest amount of support for the action, and the support expressed by visitors aged 35 to 54, who show the lowest amount of support for the action. The strong support expressed for this action by those over the age of 55 is a reflection of the desire of older tourists to experience solitude. Travelling is much more of an effort for people in this age range, and as such, more is expected out of the journey. By contrast, the group that expressed the least support were those aged 35 to 54. These are the ages at which one is most likely to be travelling with family, and as such, the inconveniences of booking a tour for multiple people when there's a maximum limit on visitors is more likely to concern those within this age range. Visitors aged under 18 and visitors aged 18 to 34 show a middling amount of support compared to the other groups, indicating that younger people don't hold as strong of an opinion about this issue than older people.

### **Allow Unguided Walks**

The post-hoc test shows that  $I (\text{under } 18) - J (35-54) = .696$ ,  $I (18-34) - J (35-54) = .619$ , and  $I (55 \text{ or older}) - J (35-54) = .323$ . This shows that the younger visitors expressed a significantly higher amount of support for allowing unguided walks than the older visitors, aged 35-54. Visitors aged 55 and older expressed middling support for allowing unguided walks, without a significant difference in from any of the other groups. Visitors

under 18 years of age and those aged 18 to 34 are more likely to become impatient waiting for a guide to become available, and more likely to desire the increased freedom that arises from walking without a guide. In addition, many of those aged 18 to 34 are travelling independently, and prefer to do things on their own, without the help of a guide. By contrast, visitors aged 35 to 54, especially those visiting with their family, are more likely to appreciate the safety and convenience provided by hiring a guide.

#### 5.6.6 Hypothesis 6: Nationality – Support for Management Action

Ho6: The differences in tourists's support for management action in the Erawan National Park with regard to nationality is not significant.

Ha6: The differences in tourists's support for management action in the Erawan National Park with regard to nationality is significant.

**Table 5.20 T-Test for Hypothesis 6**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Educate visitors about more conservation	Equal variances assumed	1.899	.169	2.811	382	<b>.005(*)</b>	.24238	.08622	.07286	.41190
	Equal variances not assumed			2.814	381.959	<b>.005</b>	.24238	.08612	.07304	.41172

Continued.....

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Provide more map and sign at different point for direction	Equal variances assumed	.896	.344	.619	382	.537	.14240	.23022	-.31025	.59505
	Equal variances not assumed			.633	228.199	.528	.14240	.22514	-.30121	.58602
Limit overall number of visitors	Equal variances assumed	2.166	.142	-2.271	382	<b>.024(*)</b>	-.24887	.10958	-.46432	-.03341
	Equal variances not assumed			-2.279	379.391	<b>.023</b>	-.24887	.10920	-.46357	-.03416
Limit number of people per group	Equal variances assumed	3.369	.067	.230	382	.819	.03475	.15133	-.26279	.33228
	Equal variances not assumed			.233	308.618	.816	.03475	.14924	-.25891	.32840
Provide more staffs	Equal variances assumed	9.433	.002	2.512	382	<b>.012(*)</b>	.25286	.10067	.05492	.45080
	Equal variances not assumed			2.500	362.357	<b>.013</b>	.25286	.10115	.05394	.45177
Limit length of stay	Equal variances assumed	.006	.936	1.775	382	.077	.19553	.11018	-.02111	.41216
	Equal variances not assumed			1.773	379.632	.077	.19553	.11026	-.02126	.41231

Continued...

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Provide souvenir product	Equal variances assumed	.006	.940	2.837	382	<b>.005(*)</b>	.27297	.09623	.08377	.46218
	Equal variances not assumed			2.840	381.980	<b>.005</b>	.27297	.09612	.08399	.46195
Provide brochure, map	Equal variances assumed	.511	.475	1.531	382	.127	.15117	.09875	-.04299	.34533
	Equal variances not assumed			1.532	381.718	.126	.15117	.09869	-.04286	.34521
Allow unguided walk	Equal variances assumed	.456	.500	2.723	382	<b>.007(*)</b>	.35367	.12988	.09831	.60904
	Equal variances not assumed			2.731	380.927	<b>.007</b>	.35367	.12952	.09901	.60834
No additional infrastructure, keep the park as it is	Equal variances assumed	2.171	.141	-1.674	382	.095	-.17631	.10535	-.38345	.03083
	Equal variances not assumed			-1.678	380.949	.094	-.17631	.10506	-.38289	.03027
Provide more amenities for comfortable stay	Equal variances assumed	.313	.576	2.308	382	<b>.022(*)</b>	.22115	.09581	.03276	.40954
	Equal variances not assumed			2.312	381.974	<b>.021</b>	.22115	.09566	.03306	.40924

Continued....



		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Reduce entrance fee	Equal variances assumed	6.670	.010	2.340	382	<b>.020(*)</b>	.24960	.10666	.03988	.45932
	Equal variances not assumed			2.351	375.686	<b>.019</b>	.24960	.10616	.04086	.45834
Provide special package	Equal variances assumed	9.764	.002	2.779	382	<b>.006(*)</b>	.26757	.09628	.07827	.45687
	Equal variances not assumed			2.771	371.969	<b>.006</b>	.26757	.09656	.07770	.45744
Lot of car parking	Equal variances assumed	.044	.834	.829	382	.408	.08236	.09937	- .11301	.27773
	Equal variances not assumed			.828	380.070	.408	.08236	.09942	- .11311	.27783

In Table 5.20, eight items have a significance level that is lower than 0.05. These are ‘educate visitors more about conservation’ ( $p = .005$ ), ‘limit overall number of visitors’ ( $p = .024$ ), ‘provide more staffs’ ( $p = .012$ ), ‘provide souvenir products’ ( $p = .005$ ), ‘allow unguided walks’ ( $p = .007$ ), ‘provide more amenities for comfortable stay’ ( $p = .022$ ), ‘reduce entrance fee’ ( $p = .020$ ), and ‘provide special package’ ( $p = .006$ ). These items reject the null hypothesis and thus adopt the alternative hypothesis. Therefore, they are considered significant in regards to nationality.

The other six items are ‘provide more maps and signs at different points for directions’ ( $p = .537$ ), ‘limit number of people per group’ ( $p = .819$ ), ‘limit length of stay’ ( $p = .077$ ), ‘provide brochure and map’ ( $p = .127$ ), ‘no additional infrastructure, keep the park as it is’ ( $p = .095$ ), and ‘lot of car parking’ ( $p = .408$ ). As these items have a significance level that is higher than 0.05, they fail to reject the null hypothesis and no significance is found with regards to nationality.

### **Educate More Visitors about Conservation**

According to Table 5.21, the first item that rejects the null hypothesis is ‘educate more visitors about conservation’. For this one, Thai respondents showed a higher level of support, with a mean score of 4.18, whereas foreign respondents showed a lower level of support, with a mean of 3.92. A response of 4 indicates ‘support’ for the action, so both Thai and foreign respondents tend to support this action, with Thai respondents showing more enthusiasm for it. This is likely because Thai visitors, having more personal connection to the national park and the environment of Thailand, are most inclined to support actions which would protect the national park and assist in conservation.

### **Limit Overall Number of Visitors**

For this item, foreign respondents showed a higher amount of support, with a mean of 3.50, whereas Thai respondents produced a mean of 3.25. 3 indicates ‘neither support nor oppose’, whereas 4 indicates ‘support’. Therefore, the Thai respondents tend to be ambivalent about this action, whereas foreign respondents tentatively support it. Thai visitors tend to travel in groups, and as such would be less likely to support limiting the

overall number of visitors. Foreigners, by contrast, oftentimes come to Thailand expecting wilderness and solitude, and are more likely to be bothered by large crowds.

### **Provide More Staffs**

For this item, Thai visitors showed a higher level of support, responding with a mean of 3.77, whereas foreigners responded with a mean of 3.52. This indicates that both Thai and foreign respondents show a tentative level of support for this action, with Thai respondents supporting it more consistently. Thai visitors, especially those visiting from Bangkok on a weekend or holiday, are more likely to expect the conveniences provided by more staff than foreigners, who usually come to Thailand expecting an adventure.

### **Provide Souvenir Products**

According to Table 5.12, Thai respondents gave a mean of 3.69, and foreign respondents giving a mean of 3.42. This indicates weak support from both groups of respondents, with Thais supporting the action somewhat stronger. Foreigners don't support this action as much as Thais due to the fact that they generally visit as part of a larger tour of Thailand, and as such, are more constrained to a budget. By contrast, Thais will oftentimes go on a short trip to a single destination, and will want to leave with some sort of memorabilia.

### **Allow Unguided Walks**

Thai visitors returned a mean of 3.09, whereas foreigners returned a mean of 2.73. An answer of 2 indicates 'oppose', and 3 indicates 'neither support nor oppose'. Therefore, the Thai respondents did not have a strong opinion about this one, whereas the foreign

respondents were generally negative. Foreigners, being from another country, are more likely to find themselves lost in the park, and as such, greatly appreciate the presence of a guide. Thais, by contrast, are slightly more comfortable walking without a guide, but still don't support allowing unguided walks, likely due to concerns about the environment.

### **Provide More Amenities for Comfortable Stay**

Thai visitors showed a higher level of support for this one, giving a mean of 3.96, whereas foreigner returned a mean of 3.74. This indicates that both Thai and foreign support for this action is quite solid, though Thai support is noticeably stronger. Most foreign visitors to Erawan National Park visit on a package tour of Kanchanaburi Province, and as such, the length of the stay is generally less than one day. By contrast, Thai visitors will often visit the park as a specific destination, either from Bangkok or Kanchanaburi, and will be more likely to stay more than one day, and, as a result, more likely to desire more amenities.

### **Reduce Entry Fee**

For 'reduce entry fee', Thai visitors responded with a mean of 3.83, showing a relatively strong amount of support, whereas foreign visitors were less enthusiastic, with a mean of 3.58. This indicates solid support from Thai respondents and slightly less solid support from foreign respondents. Most foreign tourists come from developed countries with strong currencies, and see Thailand as an inexpensive travel destination. Although the national park fee is inflated for foreigners, it is still as cheap or cheaper than national park fees in most western countries. Therefore, foreigners show less support for lowering the entrance fee than Thais.

## Provide Special Package

For the final item, Thai visitors expressed a high amount of support, with a mean of 4.10, whereas foreign visitors expressed less support, with 3.83. Both groups show a solid amount of support for the action, though Thai support is higher. Although most foreigners visit Erawan National Park as part of a larger and longer tour of Thailand, most Thais visit as a temporary getaway on a weekend or holiday. Therefore, a one to three day tour package of Erawan National Park is very appealing to Thai visitors as a means to get the most out of their experience in the park.

**Table 5.21 Group Statistics for Hypothesis 6**

	Nationality	N	Mean	Std. Deviation	Std. Error Mean
Educate visitors about more conservation	Thai	197	4.18	.86	.06138
	foreigner	187	3.92	.83	.06041
Provide more map and sign at different point for direction	Thai	197	4.14	3.04	.21635
	foreigner	187	3.99	.85	.06230
Limit overall number of visitors	Thai	197	3.25	1.14	.08132
	foreigner	187	3.50	1.00	.07288
Limit number of people per group	Thai	197	3.35	1.82	.12983
	foreigner	187	3.31	1.01	.07359
Provide more staffs	Thai	197	3.77	.89	.06371
	foreigner	187	3.52	1.07	.07856
Limit length of stay	Thai	197	3.24	1.06	.07588
	foreigner	187	3.05	1.09	.07999
Provide souvenir product	Thai	197	3.69	.96	.06860
	foreigner	187	3.42	.92	.06732
Provide brochure, map	Thai	197	3.87	.98	.06975
	foreigner	187	3.72	.95	.06982

Nationality		N	Mean	Std. Deviation	Std. Error Mean
Allow unguided walk	Thai	197	3.09	1.33	.09514
	foreigner	187	2.73	1.20	.08788
No additional infrastructure, keep the park as it is	Thai	197	3.80	1.08	.07716
	foreigner	187	3.97	.97	.07131
Provide more amenities for comfortable stay	Thai	197	3.96	.96	.06880
	foreigner	187	3.74	.91	.06647
Reduce entrance fee	Thai	197	3.83	1.13	.08070
	foreigner	187	3.58	.94	.06897
Provide special package	Thai	197	4.10	.89	.06339
	foreigner	187	3.83	1.00	.07284
Lot of car parking	Thai	197	3.66	.96	.06870
	foreigner	187	3.58	.98	.07186

#### 5.6.7 Hypothesis 7: Motivation for Visiting – Activities Participated

Ho7: Tourists' motivation to visit is not related to activities participated by visitors at Erawan National Park.

Ha7: Tourists' motivation to visit is related to activities participated by visitors at Erawan National Park.

Table 5.22 shows the results of the Pearson Correlation analysis of the connection between motivation for visiting Erawan National Park, and activities participated in by visitors to Erawan National Park. The significance level comes out to 0.00. This is lower than 0.05, and therefore, the null hypothesis is rejected. The coefficient is .66, which indicates a positive relationship between the motivation to visit and the activities participated in by tourists.



**Table 5.22 Pearson Correlation Coefficient for Hypothesis 7**

		motivation to visit	Activities participated by visitors
motivation to visit	Pearson Correlation	1	.659
	Sig. (2-tailed)		.000
	N	384	384
Activities participated by visitors	Pearson Correlation	.659**	1
	Sig. (2-tailed)	.000	
	N	384	384

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 5.23 illustrates the relationship between different motivations and activities.

### **Waterfall**

A significant connection was found between visitors who were motivated to see the waterfall and those who enjoyed sightseeing ( $p = 0.00$ ), photography ( $p = 0.00$ ), swimming in the waterfall ( $p = 0.00$ ), learning about nature ( $p = 0.02$ ), bird and butterfly watching ( $p = 0.00$ ), and landscape observation ( $p = 0.03$ ).

### **Forest**

A significant connection was found between visitors who were motivated to see the forest and those who enjoyed sightseeing ( $p = 0.00$ ), photography ( $p = 0.00$ ), swimming in the waterfall ( $p = 0.00$ ), learning about nature ( $p = 0.00$ ), bird and butterfly watching ( $p = 0.00$ ), nature walking ( $p = 0.00$ ), camping ( $p = 0.00$ ) and landscape observation ( $p = 0.00$ ).

## **Escape from the City**

A significant connection was found between those who were motivated to escape from the city and those who enjoyed sightseeing ( $p = 0.00$ ), photography ( $p = 0.00$ ), swimming in the waterfall ( $p = 0.00$ ), learning about nature ( $p = 0.00$ ), bird and butterfly watching ( $p = 0.00$ ), nature walking ( $p = 0.00$ ), camping ( $p = 0.00$ ), landscape observation ( $p = 0.00$ ), and biking ( $0.01$ ).

## **Camping**

A significant connection was found between those who were motivated by camping and those who enjoyed photography ( $p = 0.00$ ), swimming in the waterfall ( $p = 0.00$ ), learning about nature ( $p = 0.00$ ), bird and butterfly watching ( $p = 0.00$ ), nature walking ( $p = 0.00$ ), camping ( $p = 0.00$ ), landscape observation ( $p = 0.00$ ), and biking ( $0.00$ ).

## **Adventure**

A significant connection was found between those who were motivated by adventure and those who enjoyed photography ( $p = 0.02$ ), swimming in the waterfall ( $p = 0.00$ ), learning about nature ( $p = 0.00$ ), bird and butterfly watching ( $p = 0.00$ ), nature walking ( $p = 0.00$ ), camping ( $p = 0.00$ ), and biking ( $0.00$ ).

## **Rest**

A significant connection was found between those who were motivated by rest and those who enjoyed sightseeing ( $p = 0.00$ ), photography ( $p = 0.00$ ), swimming in the waterfall ( $p = 0.00$ ), and landscape observation ( $p = 0.00$ ).

## **Landscape**

A significant connection was found between those who were motivated by landscape and those who enjoyed sightseeing ( $p = 0.00$ ), photography ( $p = 0.00$ ), learning about nature ( $p = 0.00$ ), bird and butterfly watching ( $p = 0.00$ ), nature walking ( $p = 0.00$ ), landscape observation ( $p = 0.00$ ).

## **Nature Walk**

A significant connection was found between those who were motivated by the idea of a nature walk and those who enjoyed photography ( $p = 0.00$ ), swimming in the waterfall ( $p = 0.04$ ), learning about nature ( $p = 0.00$ ), bird and butterfly watching ( $p = 0.00$ ), nature walking ( $p = 0.00$ ), camping ( $p = 0.00$ ), landscape observation ( $p = 0.00$ ), and biking ( $0.00$ ).

## **Environmental Problems**

A significant connection was found between those who were motivated to learn about environmental problems and those who enjoyed sightseeing ( $p = 0.00$ ), photography ( $p = 0.00$ ), swimming in the waterfall ( $p = 0.00$ ), learning about nature ( $p = 0.00$ ), bird and butterfly watching ( $p = 0.00$ ), nature walking ( $p = 0.00$ ), camping ( $p = 0.00$ ), landscape observation ( $p = 0.03$ ), and biking ( $0.00$ ).

## **Support Local Communities**

A significant connection was found between those who were motivated to support local communities and those who enjoyed sightseeing ( $p = 0.00$ ), photography ( $p = 0.00$ ), swimming in the waterfall ( $p = 0.00$ ), learning about nature ( $p = 0.00$ ), bird and butterfly

watching ( $p = 0.00$ ), nature walking ( $p = 0.00$ ), camping ( $p = 0.00$ ), landscape observation ( $p = 0.05$ ), and biking ( $0.00$ ).

**Table 5.23 Pearson Correlation Coefficient for Motivation and Activities by visitors**

Activities Motivations	Sight seeing	Photography	Swimming in the waterfall	Learning about nature	Bird and Butterfly Watching	Nature Walking	Camping	Landscape observation	Biking
Waterfall	.353 (1) .000** (2)	.411 (1) .000 ** (2)	.505 (1) .000** (2)	.124 (1) .015 * (2)	.281 (1) .000 ** (2)	.050 (1) .333(2)	.046 (1) .365 (2)	.114(1) .025*(2)	.035(1) .495(2)
Forest	.358 (1) .000 ** (2)	.413 (1) .000 ** (2)	.354 (1) .000** (2)	.361(1) .000 ** (2)	.281 (1) .000 ** (2)	.248(1) .000** (2)	.157 (1) .002** (2)	.182 (1) .000** (2)	.083(1) .103(2)
Escape from the city	.217(1) .000** (2)	.130 (1) .011* (2)	.176 (1) .001** (2)	.167(1) .001** (2)	.184(1) .000** (2)	.190(1) .000** (2)	.299(1) .000** (2)	.217(1) .000** (2)	.125 (1) .014* (2)
Camping	.000(1) .994(2)	.154(1) .002** (2)	.154(1) .002** (2)	.257(1) .000** (2)	.328(1) .000** (2)	.439(1) .000** (2)	.612(1) .000** (2)	.177(1) .000** (2)	.389 (1) .000** (2)
Adventure	.012(1) .819 (2)	.118(1) .021*(2)	.182(2) .000** (2)	.297(1) .000** (2)	.206(1) .000** (2)	.507(1) .000** (2)	.409(1) .000** (2)	.085(1) .098 (2)	.356 (1) .000** (2)
Rest	.370(1) .000** (2)	.239(1) .000 ** (2)	.170(1) .001** (2)	-.005(1) .926(2)	.061(1) .232 (2)	-.067 (1) .188 (2)	-.018 (1) .726 (2)	.210(1) .000 ** (2)	-.034 (1) .503 (2)
Landscape	.256(1) .000** (2)	.207(1) .000** (2)	.080(1) .118 (2)	.189(1) .000** (2)	.227(1) .000** (2)	.164(1) .001** (2)	.076(1) .139 (2)	.346(1) .000** (2)	-.033 (1) .520(2)
Nature walk	.098 (1) .056 (2)	.184(1) .000 ** (2)	.106 (1) .037* (2)	.311(1) .000** (2)	.320(1) .000** (2)	.516(1) .000** (2)	.410(1) .000 ** (2)	.251(1) .000** (2)	.307(1) .000** (2)
Environment problem	.200(1) .000** (2)	.206(1) .000** (2)	.176(1) .001** (2)	.320(1) .000** (2)	.232(1) .000** (2)	.285(1) .000** (2)	.223(1) .000** (2)	.114(1) .026* (2)	.196(1) .000** (2)
Support local community	.210(1) .000 ** (2)	.281(1) .000** (2)	.224(1) .000** (2)	.322(1) .000** (2)	.283(1) .000 ** (2)	.242(1) .000 ** (2)	.299(1) .000 ** (2)	.102(1) .045 *(2)	.286(1) .000** (2)

(1) Pearson Correlation Coefficient

(2) Significant Value

\* $P < .05$ , Correlation is significant at the 0.05 level (2-tailed)

\*\*  $P < .01$ , Correlation is significant at the 0.01 level (2-tailed)

## CHAPTER 6

### SUMMARY, CONCLUSION, AND RECOMMENDATIONS

#### 6.1 Summary of Findings

**Objective 1:** To assess the characteristics of Erawan National Park visitors.

##### 6.1.1 Summary of Sample Profile

The survey found that out of 384 respondents, the majority listed their gender as ‘female’, accounting for 52.6% of the returned questionnaires, as illustrated in Table 6.1. For age, about a third of the respondents listed ‘18-34’, forming a majority with 29.7% of the returned questionnaires. ‘Thai’ was the most frequently occurring nationality, being listed on just over half, or 51.3%, of the returned questionnaires. The majority of the respondents listed ‘one time’ under number of visits, accounting for 39.6%.

**Table 6.1 Summary of respondents for demographic, visitor’s characteristic and overall experience in Erawan National Park**

<b>Demographic, visitor’s characteristic and overall experience in Erawan National Park</b>	<b>The Majority group of respondents (%)</b>
Gender	Female (52.6%)
Age	18 -34 (29.7%)
Nationality	Thai (51.3%)
Number of visit	One time (39.6%)
Length of stay	One day (51.3%)
Purpose of visitors	Holiday (43%)
Size of groups	With friends (49.2%)
Category of visitors	General park visitors (73.4%)
Overall experience	Good (63.5%)

Details gathered by the researcher as part of this study

The most common length of stay was ‘one day’, with just over half, or 51.3%, of the respondents listing this. Slightly less than half of the respondents said they were visiting Erawan National Park for the purpose of ‘holiday’, forming a majority with 43% of the returned questionnaires. About half of the respondents said they were visiting ‘with friends’ when prompted for the size of their group, accounting for 49.2% of the questionnaires. A vast majority of the respondents listed themselves as ‘general park visitors’ as opposed to ‘ecotourists’, making up about three quarters, or 73.4%, of the total number of respondents. A similarly large number of respondents listed their overall experience in Erawan National Park as being ‘good’, accounting for 63.5% of the returned surveys.

#### **6.1.2 Hypothesis testing results**

Of the 384 distributed surveys, all were returned completed. T-test was used to test hypotheses 1, 3, 4 and 6, One Way ANOVA was used to test hypotheses 2 and 5, and Pearson Correlation Coefficient was used to test hypothesis 7. The results are summarized in Table 6.2.



**Table 6.2 Summary of Hypothesis testing results**

<b>Description</b>	<b>Statistical Technique</b>	<b>Hypotheses Testing Result</b>
<b>Hypothesis 1</b>		
The differences in tourists's problem encountered during visit/stay in the Erawan National Park with regard to "gender"	T-test	All of 13 items fail to reject Ho
<b>Hypothesis 2</b>		
The differences in tourists's problem encountered during visit/stay in the Erawan National Park with regard to "age"	One-way ANOVA	All of 13 items fail to reject Ho
<b>Hypothesis 3</b>		
The differences in tourists's problem encountered during visit/stay in the Erawan National Park with regard to "nationality"	T-test	Reject Ho3 in 1 item of satisfaction
<b>Hypothesis 4</b>		
The differences in tourists's support for management action in the Erawan National Park with regard to "gender"	T-test	All of 14 items fail to reject Ho4
<b>Hypothesis 5</b>		
The differences in tourists's support for management action in the Erawan National Park with regard to "age"	One – way ANOVA	Reject Ho5 in 2items
<b>Hypothesis 6</b>		
The differences in tourists's support for management action in the Erawan National Park with regard to "nationality"	T-test	Reject Ho6 in 8 items
<b>Hypothesis 7</b>		
Relationship between tourists' motivation and participation in activities for visitors in the Erawan Nation Park	Pearson Correlation	Reject Ho7

## 6.2 Discussion

**Objective 2:** To analyze park visitors problems and their support for management action in Erawan National Park.

### **6.2.1 Problems encountered by Visitors to Erawan National Park**

This section of the survey covered potential problems encountered by the respondents, and asked them to rate the level of annoyance they felt when encountering the problem. A rating of 1 for an item in this section indicated a major problem, while a rating of 5 indicated that the respondent had not encountered the problem at all. The majority of the problems were related to annoyance or inconvenience, although some, such as ‘lack of enforcement of park regulation’ related to environmental concerns. The following discussion covers key finding concerning 13 items.

#### **Lack of Enforcement of Park Regulation**

Enforcement of regulations is extremely important in a national park, especially one that, like Erawan National Park, shelters endangered species and is popular as a destination for large tour groups. This item asked visitors to express their concern over effective enforcement of the park regulations by the staff of Erawan National Park. The mean rating for this item, taken on its own, came out to 3.52, indicating minor concern over the problem, and that most visitors did not consider it to be a source of concern or annoyance. This does not indicate that lack of enforcement is not a problem at Erawan National Park. However, it does indicate that for most visitors, the problem is either absent or not significant. The survey discovered no significant difference in concern over lack of enforcement of park regulations with regards to gender, age, or nationality.

#### **Lack of Staffs**

With the high volume of tourists that visit Erawan National Park, it is necessary for the park to maintain a high number of staffs. This item asked respondents to rate how

effectively the park had risen to that challenge. The resulting mean rating was 3.51, indicating a small amount of concern over lack of staffs in Erawan National Park, with most respondents not being concerned with or annoyed by the problem.

The survey found no significant difference in concern over lack of staffs with regards to gender and age. However, a significant difference was found with regards to nationality. Thai visitors responded with a much lower rating than foreign visitors, indicating more concern and annoyance regarding a lack of staffs. Most Thai visitors to Erawan National Park are weekenders from Bangkok, expecting an easy holiday, whereas most foreign visitors have already travelled a long distance from their home country and are more prepared for an adventure. Therefore, the added comfort of having a larger amount of staffs is more desirable for the Thai visitors than the foreign visitors.

#### **Litter Cans Inadequate/Absent**

Waste disposal is a huge issue in any national park, but especially one which is as popular as Erawan National Park. Discarded waste is ugly, and can be a serious hazard to wild animals and the environment. Therefore, a low response to this item would express both concern for the environment and personal annoyance over this issue. Of all the potential problems, visitors expressed the most concern over this one, with a mean of 3.27. This indicates a small to moderate degree of annoyance and concern from the respondents, and indicates that waste disposal is a slightly higher priority amongst those who visit Erawan National Park. No significant difference was found in concern over missing litter cans with regards to gender, age, or nationality.

### **Missing or Inadequate Information**

Visiting a national park can be an intense experience, and many visitors want to learn as much as they can about the ecology, geology, and history of the area. Therefore, providing extensive visitor information often becomes necessary. Respondents to this survey returned a mean rating of 3.46 for this item, indicating a low amount of concern and annoyance over missing information. This could be because the national park and the tour companies provide sufficient information, or because many visitors to Erawan National Park are not very concerned with obtaining information. Regardless of the reason, the result indicates that visitors are, for the most part, satisfied with the information they receive. No significant difference was found in missing or inadequate information with regards to gender, age, or nationality.

### **Missing Signs**

National parks cover large areas, and it is often easy to get lost. Therefore, maintaining an extensive system of signage is necessary in visitor areas. The mean rating for missing or inadequate information came out to 3.48, indicating relatively little annoyance over this problem. This is likely due to the fact that most people visit Erawan National Park as part of a tour, and that many of the activities in the park require a park guide. Therefore, lack of signage does not emerge as a major concern. No significant difference was found in concern over missing signs with regards to gender, age, or nationality.

### **Public Restroom Absent**

Similar to litter cans, adequate restrooms are extremely important. Inadequate disposal of human waste is a very large hazard to natural environments, and having too

few or unclean restrooms can make visiting a national park extremely unpleasant for many visitors. Visitors responded with more concern and annoyance regarding this item than the others, with the mean rating coming out to 3.35. This indicates that although the problem was minor, it was observed by many visitors, and therefore needs to be addressed. No significant difference was found in concern for this issue with regards to gender, age, or nationality.

### **Poor Access to Park**

Easy access allows a national park to increase the number of visitors, and therefore increase its income. However, poor access can be a blessing as well, as it limits the number of visitors to the park without necessitating official limits on the number of visitors. Erawan National Park is accessible by highway and by public bus, so the concern visitors expressed regarding this item was relatively small, with a mean rating of 3.54. No significant difference was found in concern for this issue with regards to gender, age, or nationality.

### **Overcrowded During Weekends and Holidays**

Erawan National Park is a beautiful region located close to Bangkok, and as a result, makes a natural destination for long weekends and holidays. Therefore, the issue of crowding becomes quite significant. The survey found minor concern with overcrowding, with a mean rating of 3.57. No significant difference in concern over this issue was found with regards to gender, age, and nationality.

### **Accommodation without Comfort**

About half of the survey respondents were on a 2 or more day stay, while the other half were only staying for one day. Moreover, ‘camping’ received a positive rating

in the section of this survey examining visitors' activities. However, the amount of satisfaction with the accommodation in Erawan National Park was lower than many of the other items, with a mean rating of 3.40. Although this does not indicate a large amount of inconvenience or annoyance, it does indicate the presence of problems. No significant difference in concern for this issue was found with regards to gender, age, or nationality.

### **Safety and Security**

Regardless of the destination, safety and security are extremely important issues for most travelers. Although Erawan National Park is a wilderness destination, and therefore inherently less dangerous than a city, security is still an issue, as the large number of visitors presents an easy opportunity for theft. Moreover, the wilderness itself provides a safety issue, due to wild animals and the danger of getting lost. Visitors showed minor concern for these issues, with a mean rating of 3.53. No significant difference was found in concern for this item with regards to gender, age, and nationality.

### **Conflict With Other Recreation Activities**

From the motivation and activity sections of this survey, it is apparent that people visit Erawan National Park for a variety of reasons and participate in a variety of activities. Conflict arises when one activity is hindered for the sake of another. For example, people who are visiting Erawan National Park to view birds and wildlife are not likely to appreciate the louder groups who are there to swim in the waterfall. Respondents showed minor concern for this issue, with a mean rating of 3.53. No significant difference was found in concern for this issue with regards to gender, age, or nationality.



### **Inadequate Car Parking**

Availability of car parking greatly increases the ease of independent access to a national park. Without extensive car parking, it is still possible to visit using public transportation or a package tour, but car parking makes it much easier to visit alone. Visitors showed minor concern for the issue of car parking, with a mean rating of 3.53. No significant difference was found in concern for this issue with regards to gender, age, or nationality.

### **Entrance Fee/Camping Fee**

The entrance fee and camping fee are important sources of income for a national park, but if too high can deter tourists from visiting. This can be a good thing or a bad thing, as it can limit the number of tourists while not decreasing the park's revenue, but can also limit access for many people, thus decreasing the visibility of conservation issues within the national park. Respondents showed minor concern for this issue, with a mean rating of 3.53. No significant difference was found in concern for this issue with regards to gender, age, or nationality.

### **6.2.2 Support for Management Action**

For this section, respondents were asked to express their support for possible future management action in Erawan National Park, with a high rating of 5 indicating strong support, and a low rating of 1 indicating strong opposition. There were a total of fourteen items in this section.

### **Educate More Visitors about Conservation**

Conservation is the primary goal of a national park, and education is a method of obtaining that goal. Ideally, every visitor who visits a park should come away

understanding the environmental issues faced by that park. This item asked respondents to rate their support for providing visitors with a greater amount of information regarding conservation issues. The mean rating came out to 4.04, indicating generally strong support amongst all of the visitors.

No significance difference was found over educating visitors about conservation with regards to gender or age. However, hypothesis 6 found that Thai respondents showed a significantly higher amount of support for this action than foreign respondents. Erawan National Park is located in Thailand, and as a result, Thai visitors are far more concerned with the preservation of its natural beauty and resources. In addition, Thai visitors want the foreign visitors to learn more about the environmental issues facing Thai national parks, and so they are likely to show a stronger amount of support than the foreign visitors. Foreign support for this action was also strong, but not as strong as Thai support. Foreign visitors, although likely concerned about conservation in general, have no personal ties to Erawan National Park, and as a result, are less concerned than Thai visitors.

#### **Provide More Maps and Signs at Different Points for Directions**

Extensive information and signs makes visiting a national park a much easier experience, and greatly increases the individual freedom of a visitor to the park. Although concern over lack of signs was found to be minor, support for increasing the number of signs and providing maps was found to be very strong, with a mean rating of 4.06. Most visitors felt that adding more signs would improve their experience at the national park. No significant difference was found in support for this action with regards to gender, age, or nationality.

### **Limit Overall Number of Visitors**

One way to counter the negative impacts of mass tourism and attempt to promote ecotourism at a national park is to limit the number of people who visit the number of visitors to the park at a given time. This has the effect of thinning crowds, and ensures that the park is not overwhelmed with huge crowds. However, it also has the effect of making it more difficult to visit the national park, especially during peak season.

This item asked respondents to rate their support for limiting the overall number of visitors to Erawan National Park. The mean rating came out to 3.37, indicating very weak support for the action. Considering that most respondents had arrived as part of a group, this is not surprising, as limiting the number of visitors would make it more difficult to arrange a visit with a group. No significance difference was found in support over limiting the number of visitors with regards to gender.

For hypothesis 5, the survey found that visitors aged 55 and older express much stronger support for this action than the other visitors. Older travelers generally enjoy solitude and quiet, and as such are more likely to be put off by large crowds. Visitors aged 34 to 54 expressed the least support for the action. Travelers in this age range are the most likely to be travelling with their family and children, and as a result, the conveniences of mass tourism are the most appealing for this group.

Hypothesis 6 found that foreign visitors expressed much stronger support for this action than Thai visitors. Having travelled a long way to reach Thailand, foreigners are more likely to be willing to put up with a little difficulty for a more personal experience, and therefore find the idea of smaller crowds appealing. Thai travelers, by contrast, tend

to travel in groups, with family or friends, and therefore would not appreciate limiting the number of visitors.

### **Limit Number of People per Group**

Limiting the size of visiting groups is an alternative to limiting the overall number of visitors. By limiting groups to a certain size, a national park shuts out the largest and cheapest package tours, and limits the crowds to a manageable size. The respondents showed weak support for this action, with a mean rating of 3.33. No significant difference was found in support for this action with regards to gender, age, and nationality.

### **Provide More Staffs**

Lack of staffs emerged earlier in the survey as the only problem for which Thai visitors expressed a stronger concern than foreign visitors. Regarding support for the management action of providing more staffs, respondents gave a mean rating of 3.64, indicating solid support for the action. No significant difference was found in support for this action with regards to gender or age. However, Thai visitors expressed significantly stronger support than foreign visitors. This is due to the fact that they also expressed a higher degree of annoyance with the problem in the first place.

### **Limit Length of Stay**

Limiting the length of time a visitor is allowed to stay in a national park can help to reduce the size of the crowds when combined with limiting the overall number of visitors. In addition, it can help reduce the environmental and social impact made by each individual visitor. However, it also limits the value of the education received by each visitor, and ecotourism programs tend to advocate a longer stay rather than a shorter stay.

Respondents were ambivalent about this action, with a relatively low mean rating of 3.14. No significant difference was found in support for this action with regards to gender, age, or nationality.

### **Provide More Souvenir Products**

Souvenirs appeal to visitors who wish to take something away from the national park to remind them that they went there. Respondents showed a solid amount of support for this item, with a mean rating of 3.56. No significant difference was found in support of this item with regards to gender and age. Thai visitors, however, expressed a significantly larger amount of support than foreign visitors. Most Thai visitors to Erawan National Park are coming from Bangkok as a short trip, and as such, have more money to spend on souvenirs. Foreigners, however, are usually on a longer trip from their home country and have visited and intend to visit many more sites within Thailand. As such, budget is more important to them, and photographs are usually the main souvenir they take away.

### **Provide Brochure or Map**

A brochure or map is a cheaper alternative to providing more extensive signs, and can also serve as a free souvenir for a visitor to take away with them. Visitors to Erawan National Park expressed solid support for this action, with a mean rating of 3.79. No significant difference was found in support for this action with regards to gender, age, or nationality.

### **Allow Unguided Walks**

Allowing unguided walks has several potential effects on the experience of a visitor to a national park. It can allow a greater degree of freedom for the individual visitor, as they

can go anywhere they like, rather than just the places that their guide takes them. It makes it easier and cheaper, as the visitor does not have to pay for or wait for a guide. However, it also leads to weaker regulation of visitors. Nobody is available to stop the unaccompanied visitor from disposing of their waste in an improper manner. Moreover, requiring visitors to hire a guide forces them to support the local community and increases demand for local guides, which can serve as an alternative to illegal hunting and logging for communities located within the protected area.

Support for this item was the lowest, with a mean rating of 2.91. No significant difference was found in support for this item with regards to gender. However, for hypothesis 5, the youngest visitors, aged 18 and under, wanted to be allowed to walk without a guide much more than the older visitors. Young people are far less patient than older people, and most children wanted to depart on their walk right away, without waiting for a guide. The visitors aged 35 for 54 showed the least support for this action. As many people in this age are travelling with family, the convenience of a guide is much greater, and walking alone is seen as stressful and dangerous.

For Hypothesis 6, Thai visitors expressed stronger support for this item than foreign visitors. Thai visitors are generally more familiar with areas such as Erawan National Park, and as a result, are more likely to be comfortable walking alone. However, their support for the item was still not strong. Foreign visitors showed a much stronger degree of opposition. This is likely due to a desire to escape the crowds with the assistance of a guide, as well as less familiarity with their surroundings.



### **No Additional Infrastructure, Keep the Park as it is.**

Although building new infrastructure can improve the ease of visiting a national park and improve the overall experience of visitors to the park, it can also have negative effects, including loss of resources, larger and noisier crowds, and increased waste management issues. Respondents to this survey showed strong support for not building additional infrastructure, with a mean rating of 3.88. No significant difference in support for this action was found with regards to gender, age, or nationality.

### **Provide more amenities for comfortable stay**

Although the majority of visitors to Erawan National Park stayed for only one day, almost half of the visitors stayed for two or more. When a national park is receiving multiple-day visitors, it is necessary for the park to address issues relating to hospitality. Despite the large number of one day visitors, this item received strong support, with a mean rating of 3.85. No significant difference in support was found with regards to gender and age. For hypothesis 6, Thai visitors showed a significantly higher amount of support for the action. This, like some of the previously discussed issues, is due to the fact that Thai visitors are usually visiting for the weekend, and as such expect a relaxing, holiday experience. Foreign visitors, having already endured the discomfort of the trip from their home country, are more accepting of a rough and uncomfortable experience, although they also express strong support for providing more amenities.

### **Reduce Entrance Fee**

A high entrance fee improves the income for a national park, but at the same time can dissuade people from visiting. Erawan National Park has two entrance fees, one for Thai visitors, and a higher entrance fee for foreign visitors. This item received solid

support, with a mean of 3.71. No significance difference was found in support with regards to gender and age.

Despite having a lower entrance fee, Thai visitors expressed strong support for lowering the entrance fee, while foreign visitors expressed weak support. Similar to previous items, this is due to the greater need for convenience experienced by Thai visitors, who are more likely to be on a short trip than foreign visitors. Foreign visitors, having already endured the expenses of travelling to Thailand, are more likely to be willing to spend more.

### **Provide Special Package**

Special packages can be used to promote a national park and encourage more visitors to come. They can offer a convenient and inexpensive way to visit a park, that is also well controlled, and, if well designed, can potentially be sustainable. Visitors strongly supported this action, with a mean rating of 3.96. No significant difference was found in support for this action with regards to gender or age.

For hypothesis 6, Thai respondents expressed very strong support for this item, significantly more support than was expressed by foreign respondents. Because most foreigners do not live near to Erawan National Park, it is much harder for them to take advantage of a special package. Moreover, because most Thais are visiting on weekends and holidays, it is often necessary for them to use a special package in order to get the most out of their experience at the park.

### **Lot of Car Parking**

Expanding car parking can make individual access to a park far easier, but remains a controversial move, due to the necessity of paving over parts of the forest, as

well as the increased crowds that increased parking makes possible. Nonetheless, tourists showed moderate support for this action, with a mean rating of 3.61. No significant difference was found in support for this action with regards to gender, age, or nationality.

### **6.2.3 Motivation for Visiting and Activities Participated**

**Objective 3:** To study the relationship between motivation for visiting and activities participated in by visitors to Erawan National Park.

These two sections of the survey examined the motivation of each respondent for visiting Erawan National Park, and the activities they participated in while there. The motivation consisted of the potential reasons that the respondent decided to leave their home to visit the park in the first place, while the activities consisted of what they did while they were at the park. In order to study the relationship between these two variables, a Pearson Correlation Coefficient was used to analyze the data, and a significant relationship was found.

#### **Waterfall**

The Erawan Waterfall is the single most famous attraction at Erawan National Park, and one of the main attractions of Kanchanaburi Province in general. It is considered to be one of the most beautiful waterfalls in Thailand. Respondents who placed a high emphasis on this item were motivated by the chance to see the famous waterfall. Naturally, this was one of the highest rated motivations, with a mean rating of 4.04. Visitors who considered the waterfall an important motivation greatly enjoyed sightseeing, photography, swimming in the waterfall, and bird and butterfly watching. In addition, many of them also enjoyed learning about nature and landscape observation. No significant link was found to camping, nature walking, or biking.

## **Forest**

For many, forest is the most quintessential image of nature, and when one makes the decision to visit a national park, one of the main objectives is seeing the forest. This item received a strong rating as a motivation, with a mean of 3.96. Visitors who listed the forest as an important motivation enjoyed sightseeing, photography, swimming in the waterfall, learning about nature, bird and butterfly watching, nature walking, camping, and landscape observation. The only activity without a significant link to this motivation is biking.

## **Escape from City Life**

This is an important motivation in visiting any national park that's located close to a city. Given Erawan National Park's proximity to Bangkok, it makes sense that this would be a strong motivation for many. The rating for this item as a motivation proved to be only somewhat strong, with a mean of 3.79. Respondents who listed escape from city life as an important motivation enjoyed all of the activities, but especially enjoyed sightseeing, learning about nature, swimming in the waterfall, bird and butterfly watching, nature walking, camping, and landscape observation.

## **Camping**

Given that almost half of the visitors surveyed had stayed for more than one day, camping is likely to be popular at Erawan National Park. As a motivation for visiting, however, it was ranked relatively low, with a mean rating of 3.35. Respondents who listed camping as an important motivation enjoyed photography, learning about nature, swimming in the waterfall, bird and butterfly watching, nature walking, camping,

landscape observation, and biking. The only activity that did not have a significant link to camping was sightseeing.

### **Adventure**

A visitor listing adventure as a motivation wants to escape from routine and experience something new, exciting, and fun, though not necessarily comfortable, such as biking or trekking. Visitors listing adventure as an important motivation enjoyed swimming in the waterfall, learning about nature, bird and butterfly watching, nature walking, camping, and biking. Many of them also enjoyed photography. No significant link was found to sightseeing and landscape observation.

### **Rest**

A visitor listing rest as a motivation also wants to escape from routine, but seeks comfort and familiarity in their vacation. This motivation received the strongest rating, with a mean of 4.23. Visitors listing rest as an important motivation enjoyed sightseeing, photography, swimming in the waterfall, and landscape observation. No significant link was found to any of the other activities, indicating that people seeking rest participated in fewer activities than any of the other groups.

### **Landscape**

Like forest, the word landscape evokes the natural beauty and complexity of nature. A visitor seeking landscape is likely to have a very artistic view of the world and wants to see beautiful things. This motivation received a very strong rating, with a mean of 4.16. Visitors motivated by landscapes enjoyed sightseeing, photography, learning about nature, bird and butterfly watching, nature walking, and landscape observation. No

significant link was found to the more physical activities, such as swimming in the waterfall, biking, and camping.

### **Nature Walk**

A visitor intending to participate in a nature walk does not have any particular attraction in mind and only wishes to enjoy nature. This motivation received a moderate rating, with a mean of 3.52. Respondents who were motivated by the opportunity for a nature walk enjoyed photography, swimming in the waterfall, learning about nature, bird and butterfly watching, nature walking, landscape observation, and biking. No significant link was found with sightseeing.

### **Environmental Problems**

As education is a primary goal of a national park, many visitors are motivated by the opportunity to learn about and help solve environmental problems. These visitors might also be visiting for fun, but feel they have an important purpose in being there. This motivation received a moderate rating of 3.56. Visitors who were motivated by learning about environmental problems enjoyed all activities, although the activity with the least significant connection to this motivation was landscape observation.

### **Support Local Communities**

Society and the environment are closely connected, and social issues are in many ways as important as environmental issues. In the case of a protected area, a healthy society greatly helps maintaining a healthy environment. This motivation received a relatively weak rating of 3.28. Visitors who were motivated by the opportunity to support local communities enjoyed all activities, with landscape observation having the least significant connection.



### 6.3 Conclusion

The study found that the majority of visitors to Erawan National Park are young, visit for one day only, and categorize themselves as general park visitors. Gender and nationality are split even, with women being slightly more frequent than men and Thais being slightly more frequent than foreigners. Based on age, younger visitors tended to favor more of a mass tourism approach, expressing greater support for allowing unguided walks, and less support for limiting the number of visitors, while older visitors tended to favor a more sustainable approach.

Thai visitors tended to be pickier about their trip, expressing more desire for comfort. They expressed more dissatisfaction with the lack of staff available at the park, and stronger support for management action that would make their visit more convenient, such as more amenities for overnight visitors, lower entrance fees, and special packages. However, Thai visitors also expressed stronger concern for educating visitors about the environment, indicating a greater environmental awareness.

According to the definition of ecotourists as defined by Hvenegaard and Dearden (1998), the vast majority of the visitors to Erawan National Park are not ecotourists. More than half stay only one day, and a majority of them visit as part of a large group. When examining motivations, support for local communities and environmental issues received relatively little support compared to rest, viewing landscapes, and visiting the waterfall. Moreover, the vast majority of them do not define themselves as ecotourists, but rather as general park visitors. This is in keeping with Hvenegaard and Dearden's (1998) study, which found that the majority of those visiting Doi Inthanon National Park were not ecotourists.

A strong connection was found between the respondents' motivations for visiting, and the activities they considered important while at the national park. Those who listed motivations such as 'adventure', 'camping', and 'nature walk' were found to be more interested in ecotourism activities such as biking, camping, and learning about nature. By contrast, those who listed 'rest' were found to be uninterested in learning about nature. Unfortunately, 'rest' is the most popular motivation for visiting.

#### **6.4 Recommendations**

Based on the findings, the researcher proposes the following actions within Erawan National Park. Include recommendations based on gender, age and nationality.

##### **1. Develop a Solid Ecotourism Program**

Thai visitors expressed a significant amount of support for providing a special package, and also expressed strong concern regarding the education available to visitors of the national park. Despite the relatively low amount of ecotourism apparent in Erawan National Park, the park contains strong potential for ecotourism development. For the most part, there is strong support for actions that would benefit the park, such as not building more infrastructure, and providing more education to visitors. The strong support, particularly from Thai visitors, for providing a special tour package, provides an excellent opportunity to develop an affordable ecotourism program, targeted at Thai visitors, to allow them to get in touch with nature on a weekend excursion from Bangkok. Based on the comparison of motivations and activities of visitors, one could develop a three-day package out of Bangkok targeting those who visit for the purpose of 'rest'. The program would seek to educate about the ecology of the park through landscape observation, and feature a visit to the waterfall and a comfortable homestay in a local

village. This is just one example of an ecotourism package that would be suitable for Erawan National Park. The ecotourism programs could be expanded to be targeted at foreign visitors at a later date, but the strong support shown by Thai respondents for education and providing a special package indicate that the domestic travel market would be the best place to market it at first.

## **2. Increase the Amount of Information Available to Tourists**

Aside from providing better directions within the park, the management should provide signs providing information about the visitors' surroundings, and including information about trees, soil erosion, and various phenomena that are visible to the average visitor. This would increase the amount of education received by visitors, while at the same time making it easier for them to find their way around.

## **3. Market Erawan National Park to Older Tourists**

The research found that although the ages were largely even, younger tourists formed a slightly larger group than older tourists, with just under a third of the respondents being between the ages of 18 and 34. However, the older tourists invariably favored an ecotourism approach, preferring solitude, opposing unguided walks, and supporting limiting the number of visitors. Erawan National Park should be marketed as a quiet ecotourism destination, with wildlife viewing one of the primary activities.

## **6.5 Further Research**

This study examined various visitor characteristics and their relationship with support for management action and concern for problems. The most dramatic differences were

found in regards to nationality, with Thai and foreign visitors oftentimes expressing very different views. Further study could cover the relationship between nationality and motivation for visiting, and could help market the park to Thais and foreigners as effectively as possible, and to create an experience that is enjoyable to all visitors.



## REFERENCES

- Anderson, G. (1996). *Fundamental of Education Research*. Falmer Press
- Boyd, S.W., Butler, R.W, Haider, W., & Perera, A.H. (1994). Identifying areas for ecotourism in Northern Ontario: application of a geographical information system methodology. *Journal of Applied Recreational Research*, 19(1), 41-66.
- Brockelman, W.Y. & Dearden, P. (1990). The role of nature trekking in conservation: a case-study in Thailand. *Environmental Conservation*, 17, 141-148.
- Chettamart, S. (2003). Ecotourism resources and management in Thailand. *Paper presented at Malaysia-Thailand Technology and Business Partnership Dialogue*. Langkawi: Malaysia.
- Chin, C.L.M., Moore, S.A., Wallington, T.J., & Dowling, R.K. (2000). Ecotourism in Bako National Park, Borneo: Visitors' perspectives on environmental impacts and their management. *Journal of Sustainable Tourism*, 8(1), 20-35.
- Cohen, E. (1998). Hill Tribe Trekking in Thailand. *Annals of Tourism Research*, 30-60.
- Cutter, P. & Challis, N. (2001). Applying best practice ecotourism concepts to conservation in Thailand: A case study. *Presented at the Third International Hornbill Workshop*. Phuket: Thailand
- Dearden, P. (1991). Tourism and development in northern Thailand. *The Geographical Review*, 400-413.

- Dearden, P., Chettamart, S., Emphandu, D., & Tanakanjana, N. (1996). National parks and hill tribes in northern Thailand: A Case Study of Doi Inthanon. *Society and Natural Resources*, 125-141.
- Department of National Parks, Wildlife, and Plant Conservation. (2004). *National park*. Retrieved on April 05,2010 from <http://www.dnp.go.th/parkreserve/nationalpark.asp?lg=2>.
- Department of National Parks, Wildlife, and Plant Conservation. (2006). *National parks in Thailand*. Bangkok: Thailand.
- Department of National Parks, Wildlife, and Plant Conservation. (2009). *Number of tourists visiting national parks in fiscal year 2005-2009*. Bangkok: Thailand.
- Dixon, J.A. & Sherman, P.B. (1990). *Economics of protected areas. A new look at benefits and costs*. Island Press: Washington DC.
- Emphandu, D. (2003). Community-based Tourism in Protected Areas. *Paper presented at the first research team meeting, Strategy for Facilitating Community-based Tourism in Protected Areas under APEIS project*. Tokyo: Japan.
- Hardy, A., Beeton, R.J.S., & Pearson, L. (2002). Sustainable tourism: an overview of the concept and its position in relation to conceptualizations of tourism. *Journal of Sustainable Tourism*, 10(6), 475-495.
- Highland and Island Enterprise. (2010). *Green tourism*. Retrieved on February 14,2010 from <http://www.hie.co.uk/green-tourism.html>.



- Hvenegaard, G. (2002). Tourist typologies for ecotourism research. *Journal of Ecotourism*, 1(1), 7-18.
- Hvenegaard, G. & Dearden, P. (1993). Ecotourism versus tourism in a Thai national park. *Annals of Tourism Research*, 27(3), 700-717.
- International Union for the Conservation of Nature. (2009). *IUCN Thailand Programme*. Retrieved on January 15, 2010 from <http://www.iucn.org/thailand/>.
- Kanchanaburi Map. Retrieved on November 16, 2009 from <http://www.kanchanaburi.com/>.
- Khomkris, T. (1965). Forestry in Thailand. *Faculty of Forestry* (pp. 216). Kasetsart University Bangkok: Thailand.
- National Park Act B.E. 2504 (1961). Retrieved on November 20, 2009.
- National Reserved Forests Act B.E. 2507 (1964). Retrieved on November 20, 2009 from <http://www.adb.org/Environment/laws-regulations.asp>
- Niefer, I.A., da Silva, J.C.G.L, & Amend, M. (2002). Analysis of the visitors of Superagui National Park, Brazil. *Current Issues in Tourism*, 5, 208-221.
- Obua, J., & Harding, D.M. (1996). Visitor characteristics and attitudes towards Kibale National Park, Uganda. *Tourism Management*, 17(7), 495-505.
- Obua, J., & Harding, D.M. (1997). Environmental impact of ecotourism in Kibale National Park, Uganda. *Journal of Sustainable Tourism*, 5(3), 213-223.

- Pipithvanichtham, P. (1997). Issues and challenges of ecotourism in the national parks of Thailand. *National Park in Thailand* (pp. 1-10). Bangkok: Thailand.
- Ross, W. (2003). Sustainable tourism in Thailand: can ecotourism protect the natural and cultural environments? *International Sustainability Conference*, 5-20.
- Savitz, A.W., & Weber, K. (2006). *The Triple bottom line: how today's best-run companies are achieving economic, social, and environmental success - and how you can too*. San Francisco, CA: Jossey-Bass.
- Sims, K.R.E. (2009). *Conservation and development: evidence from Thai protected areas*. Amherst College: Amherst, MA.
- TAT. (2007 a). Tourism statistics in Thailand 1998-2007. Retrieved on May 05, 2010, from [http://www2.tat.or.th/stat/web/static\\_index.php](http://www2.tat.or.th/stat/web/static_index.php)
- TAT. (2007 b). Tourism Statistic in Kanchanaburi 2007. Thailand. Retrieved on July 06, 2010, from [http://www2.tat.or.th/stat/web/static\\_tst.php](http://www2.tat.or.th/stat/web/static_tst.php)
- TAT. (2009). *Thailand steps up "Green Tourism" drive*. Retrieved on January 05, 2009, from <http://www.tatnews.org/ATF2009/4159.asp/>.
- TAT. (2009). Thailand Tourism Campaign. Bangkok: Thailand. Retrieved on March 14, 2010 from <http://www.tourismthailand.org/>
- Thailand Development Research Institute. (1997). Thailand tourism vision: 2010. *Natural Resources and Environment Program*, 14-24.

Wild Animals Reservation and Protection Act B.E. 2535 (1992). Retrieve on March 20, 2010 from: <http://www.cites.org/common/cop/14/doc/E14-52A06.pdf>

WTO and United Nations Environment Programme. (2010). Retrieved on May 05, 2010, from <http://www.wto.org/>

Ziedler, Dana L. (2010). *What is a theoretical framework?* Retrieved on January 05, 2009, from <http://www.coedu.usf.edu/jwhite/secedseminar/theoryframe.pdf>.





## Questionnaire



Dear Respondents:

This questionnaire is designed as part of fulfillment of the requirements for the degree of Master of Business Administration in Tourism Management, Graduate School of Business, Assumption University, Thailand. The thesis title is 'Visitors characteristics, Motivations and Support for Management Action for Erawan National Park, Kanchanaburi, Thailand'. Your answers are very valuable and your information will be strictly used for educational purpose and treated confidential. Your cooperation and precious time on this questionnaire is highly appreciated.

Sincerely,

Thunvadee Hethark

---

### Part I: Demographic information

1. Gender

- ☐ Male ☐ Female

2. Age

- ☐ Under 18 ☐ 18-34 ☐ 35- 54 ☐ 55 or older

3. Nationality

- ☐ Thai ☐ Foreigner

## Part II: Visitors trip characteristics

4. Number of visit
  - ☐ One time
  - ☐ Two- three times
  - ☐ More than three times
5. Length of stay
  - ☐ One day
  - ☐ two – three days
  - ☐ More than three days
6. Purpose of visit
  - ☐ Holiday
  - ☐ Adventure activities
  - ☐ Education
  - ☐ Visiting the waterfall
  - ☐ Enjoying beautiful scenery ( Plants and animals )
7. Size of group
  - ☐ Alone
  - ☐ Couple
  - ☐ With friends
  - ☐ With family
8. Choose the category that describes yourself best.
  - ☐ General park visitor
  - ☐ Nature tourist / eco tourist

## Part III: Motivation for visiting Erawan National Park

Please tick (✓) the box that best indicates the level of importance for the following attractions, where 5 – extremely important, 4 – fairly important, 3- neither important nor unimportant, 2 – not so important, 1- not at all important

No.	Statement	5	4	3	2	1
9.	Waterfall ( swimming, picnic)					
10.	Forest ( flowers)					
11.	Escape from city life ( to change the normal routine)					
12.	Camping ( skill to set up tent, socialize)					
13.	Adventure ( biking )					
14.	Rest ( relaxation)					
15.	Landscape ( beauty of nature)					
16.	Nature walk (a complementary tour guide service accompany you)					
17.	Environmental problems (to get awareness of garbage and waste disposal)					
18.	Support local communities ( buy local souvenirs)					



#### Part IV: Activities participated in while visiting Erawan National Park

Please tick ( ) the box that best indicates how important you find the following activities, where 5 – most enjoyed activity, 4- fairly enjoyed activity, 3 – neither or nor enjoyed activity, 2 – somewhat not enjoyed activity , 1 – least enjoyed activity

No.	Statement	5	4	3	2	1
19.	Sight seeing					
20.	Photography					
21.	Swimming in the waterfall					
22.	Learning about nature					
23.	Bird and Butterfly watching					
24.	Nature walking					
25.	Camping					
26.	Landscape observation					
27.	Biking					

#### Part V: Problems encountered during stay in Erawan National Park

Please tick ( ✓ ) the box which best indicates your concern over the following problems, where 5- No problem, 4- indifferent, 3- slight problem ( it happened, but did not annoy), 2 – problem, 1- serious problem

No.	Concern	5	4	3	2	1
28.	Lack of enforcement of park regulation					
29.	Lack of staffs					
30.	Litter cans inadequate/absent					
31.	Missing or inadequate information					
32.	Missing sign					
33.	Public restroom absent					
34.	Poor access to park					
35.	Overcrowded during weekend and holiday					

No.	Concern	5	4	3	2	1
36.	Accommodation without comfort					
37.	Safety and security					
38.	Conflict with other recreation activities					
29.	Inadequate car parking					
40.	Entrance fee/camping fee					

41. Any other problems

---



---



---



---



---

#### Part VI: Recommended management action

Please tick (✓) the box which best indicates your support management action , where 5- Strongly support , 4- support, 3- neither support nor oppose, 2- oppose, 1- strongly oppose

No.	Management action	5	4	3	2	1
42.	Educate visitors more about conservation					
43.	Provide more map and sign at different point for direction					
44.	Limit overall number of visitors					
45.	Limit number of people per group					
46.	Provide more staffs					
47.	Limit length of stay					
48.	Provide souvenir product					
49.	Provide brochure, map					
50.	Allow unguided walk					

No.	Management action	5	4	3	2	1
51.	No additional infrastructure, keep the park as it is					
52.	Provide more amenities for comfortable stay					
53.	Reduce entrance fee					
54.	Provide special package					
55.	Lot of car parking					

56. Any recommendation to support management action in Erawan Nation Park

---



---



---

**Part VII: Overall experience in Erawan National Park.**

o Excellent o Good o Ordinary o Bad o Terrible



## APPENDIX B



## แบบสอบถาม



เรียน ท่านผู้ตอบแบบสอบถาม:

แบบสอบถามชุดนี้จัดทำขึ้นโดยเป็นส่วนหนึ่งของหลักสูตรปริญญามหาบัณฑิตสาขารัฐกิจด้านการจัดการท่องเที่ยว บัณฑิตวิทยาลัย มหาวิทยาลัยอัสสัมชัญ ประเทศไทย ในหัวข้อวิทยานิพนธ์เรื่อง “ลักษณะ เหตุจูงใจ และแนวทางในการปรับปรุง อุทยานแห่งชาติเอราวัณ จังหวัดกาญจนบุรี ประเทศไทย” คำตอบของท่านนั้นมีความสำคัญ และข้อมูลที่ได้จากท่านจะได้รับการเก็บรักษาและนำไปใช้เพื่อประโยชน์ทางการศึกษาเท่านั้น ขอขอบคุณท่านที่สละเวลาและให้ความร่วมมือในการตอบแบบสอบถามชุดนี้

ขอแสดงความนับถือ

ธันว์ดี เหตุหา

### ส่วนที่ 1: ข้อมูลทั่วไป

1. เพศ

☐ ชาย

☐ หญิง

2. อายุ

☐ น้อยกว่า 18 ปี

☐ 18-34 ปี

☐ 35-54 ปี

☐ 55 ปี หรือมากกว่า

3. สัญชาติ

☐ ไทย

☐ ต่างชาติ

## ส่วนที่ 2: ลักษณะของนักท่องเที่ยว

4. จำนวนครั้งที่เคยมาเที่ยว

☐ 1 ครั้ง

☐ 2-3 ครั้ง

☐ มากกว่า 3 ครั้ง

5. ระยะเวลาที่พัก

☐ 1 วัน

☐ 2-3 วัน

☐ มากกว่า 3 วัน

6. จุดประสงค์ของการมาเที่ยว

☐ วันหยุด

☐ กิจกรรมผจญภัย

☐ ทัศนศึกษา

☐ เยี่ยมชมน้ำตก

☐ ชมทัศนียภาพ (ธรรมชาติและสัตว์)

7. ลักษณะของกลุ่ม

☐ คนเดียว

☐ คู่รัก/คู่สมรส

☐ เพื่อน

☐ ครอบครัว

8. อธิบายความเป็นนักท่องเที่ยวของท่าน

☐ นักท่องเที่ยวทั่วไป

☐ นักท่องเที่ยวเชิงอนุรักษ์ธรรมชาติ

## ส่วนที่ 3: สิ่งดึงดูดใจที่ทำให้ท่านมาท่องเที่ยวอุทยานแห่งชาติเอราวัณ

จากข้อความข้างล่างนี้ กรุณาทำเครื่องหมาย (✓) ลงในช่องที่ท่านคิดว่ามีความสำคัญที่ทำให้ท่านมาเที่ยว ซึ่ง 5-สำคัญที่สุด 4- สำคัญ 3- ปานกลาง 2- สำคัญน้อย 1- สำคัญน้อยที่สุด

ลำดับที่	สิ่งบ่งชี้	5	4	3	2	1
9.	น้ำตก ( ถ้วยน้ำ, ปิคนิค )					
10.	ป่า ( ชมความสวยงามของดอกไม้ )					
11.	หนีความวุ่นวายจากชีวิตในเมือง ( เปลี่ยนแปลงการใช้ชีวิตประจำวัน )					
12.	แคมป์					
13.	กิจกรรมผจญภัย ( ปั่นจักรยาน )					
14.	พักผ่อน					



ลำดับที่	สิ่งบ่งชี้	5	4	3	2	1
15.	ทัศนียภาพ (ชมความงามในอุทยาน)					
16.	เดินป่า (มีเจ้าหน้าที่คอยดูแลระหว่างการเดินทาง)					
17.	ศึกษาปัญหาเกี่ยวกับสิ่งแวดล้อม (ตระหนักถึงปัญหาขยะ)					
18.	สนับสนุนสินค้าของชุมชน (อุดหนุนสินค้าท้องถิ่น)					

#### ส่วนที่ 4: กิจกรรมที่ท่านเข้าร่วมระหว่างที่เข้าพักในอุทยานแห่งชาติเอราวัณ

จากข้อความข้างล่างนี้ กรุณาทำเครื่องหมาย (✓) ลงในช่องกิจกรรมที่ท่านชื่นชอบ ซึ่ง 5- ชื่นชอบมากที่สุด 4- ชื่นชอบ 3- เฉยๆ 2- ชื่นชอบน้อย 1- ไม่ชื่นชอบเลย

ลำดับที่	สิ่งบ่งชี้	5	4	3	2	1
19.	ชมอุทยาน					
20.	ถ่ายภาพ					
21.	ว่ายน้ำที่น้ำตก					
22.	เรียนรู้วิถีธรรมชาติ					
23.	ดูนกและผีเสื้อ					
24.	เดินป่า					
25.	แคมป์					
26.	ชมทัศนียภาพ					
27.	ปั่นจักรยาน					

#### ส่วนที่ 5: ปัญหาที่ท่านเจอระหว่างเข้าพักที่อุทยานแห่งชาติเอราวัณ

จากข้อความข้างล่างนี้ กรุณาทำเครื่องหมาย (✓) สำหรับปัญหาที่ท่านเจอ ซึ่ง 5- ไม่มีปัญหาใดๆทั้งสิ้น 4- ไม่มีปัญหา 3- มีปัญหาเพียงเล็กน้อย (แต่ไม่ได้ส่งผลกระทบต่อท่าน) 2- มีปัญหา 1- มีปัญหาเป็นอย่างมาก

ลำดับที่	สิ่งบ่งชี้	5	4	3	2	1
28.	ไม่มีการจัดระเบียบที่เพียงพอในอุทยาน					
29.	เจ้าหน้าที่อุทยานไม่เพียงพอ					
30.	จำนวนถังขยะไม่เพียงพอ					
31.	ขาดการประชาสัมพันธ์					
32.	สัญลักษณ์บอกทางไม่เพียงพอ					

ลำดับที่	สิ่งบ่งชี้	5	4	3	2	1
33.	ห้องน้ำสาธารณะไม่เพียงพอ					
34.	ทางเข้าอุทยานแห่งชาติไม่สะดวก					
35.	จำนวนนักท่องเที่ยวมากเกินไปช่วงวันหยุด					
36.	สิ่งอำนวยความสะดวกไม่ดีพอ					
37.	ความปลอดภัย					
38.	ความสับสนเกี่ยวกับกิจกรรม					
39.	จำนวนพื้นที่จอดรถไม่เพียงพอ					
40.	ค่าเข้าอุทยานแห่งชาติ / ค่าแคมป์					

41. ปัญหาอื่นๆ

---



---



---

#### ส่วนที่ 6: คำแนะนำในส่วนของการบริหารจัดการ

กรุณาทำเครื่องหมาย (✓) ลงในช่องที่ท่านคิดว่าควรจะมีการส่งเสริมการจัดการ ซึ่ง 5- ส่งเสริมอย่างยิ่ง 4- ส่งเสริม 3- ไม่มีความคิดเห็น 2- ไม่ส่งเสริม 1- ไม่ส่งเสริมเป็นอย่างยิ่ง

ลำดับที่	การจัดการ	5	4	3	2	1
42.	ให้ความรู้เกี่ยวกับการอนุรักษ์ธรรมชาติ					
43.	เพิ่มแผนที่และป้ายบอกทาง					
44.	จำกัดจำนวนนักท่องเที่ยว					
45.	จำกัดจำนวนนักท่องเที่ยวของแต่ละกลุ่ม					
46.	เพิ่มจำนวนเจ้าหน้าที่อุทยาน					
47.	จำกัดระยะเวลาของการเข้าพัก					
48.	สนับสนุนการจำหน่ายของที่ระลึก					
49.	เพิ่มแผ่นพับและแผนที่ให้มากขึ้น					
50.	อนุญาตให้ไม่มีผู้นำเที่ยว					
51.	ห้ามก่อสร้างสิ่งใดๆเพิ่มขึ้นภายในอุทยานแห่งชาติ					

ลำดับที่	การจัดการ	5	4	3	2	1
52.	เพิ่มสิ่งอำนวยความสะดวกแก่นักท่องเที่ยว					
53.	ลดค่าเข้าชมอุทยาน					
54.	จัดทำโปรแกรมพิเศษส่งเสริมการท่องเที่ยว					
55.	เพิ่มพื้นที่จอดรถ					

56. คำแนะนำเพิ่มเติมในการจัดการบริหารอุทยานแห่งชาติเอราวัณ

---



---



---

ส่วนที่ 7: ประสพการณ์ที่ท่านได้รับจากการเที่ยวอุทยานแห่งชาติเอราวัณ (เลือกเพียงข้อเดียวเท่านั้น)

☐ เยี่ยมมาก
 ☐ ดี
 ☐ ธรรมดา
 ☐ ไม่ดี
 ☐ แย่มาก

